HEARING

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Application for)
Certification for the) Docket No. 99-AFC-5
OTAY MESA GENERATING)
PROJECT (PG&E Generating))
)

SAN DIEGO COUNTY ADMINISTRATION BUILDING

ROOMS 302 and 303

1600 PACIFIC HIGHWAY

SAN DIEGO, CALIFORNIA

TUESDAY, NOVEMBER 21, 2000 9:50 A.M.

Reported by: Valorie Phillips Contract No. 170-99-001 ii

COMMITTEE MEMBERS PRESENT

Robert Laurie, Presiding Member

Robert Pernell, Associate Member

STAFF PRESENT

Susan Gefter, Hearing Officer

Scott Tomashefsky, Advisor to Commissioner Laurie

Ellen Townsend-Smith, Advisor to Commissioner Pernell

Jeff Ogata, Senior Staff Counsel

Lisa DeCarlo, Staff Counsel

Eileen Allen, Project Manager

Matthew Layton

Obed Odoemelam

William Wood, Jr.

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INTERVENORS PRESENT

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Gary S. Rubenstein Sierra Research 1801 J. Street Sacramento, CA 95814 representing Cabrillo Power iv

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Holly Duncan

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ALSO PRESENT

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Melanie McCutchan Environmental Health Coalition

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PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

1	PROCEEDINGS
2	3:05 p.m.
3	PRESIDING MEMBER LAURIE: Good morning,
4	my name is Robert Laurie, Commissioner of the
5	California Energy Commission, a Member of the
6	Siting Committee hearing the Otay Mesa Generation
7	Project case.
8	With me on the dais is Commissioner
9	Robert Pernell, my colleague on the Siting
10	Committee.
11	To my immediate left is Ms. Susan
12	Gefter, the Hearing Officer administering the
13	proceeding. And to my right is Mr. Scott
14	Tomashefsky, my Senior Advisor. Ms. Ellie
15	Townsend-Smith, Commissioner Pernell's Advisor,
16	will be joining him shortly.
17	What we'd like to do at this time is
18	just take a moment and talk about today's agenda.
19	And what our expectations are and what your
20	expectations may be, as well.
21	Ms. Gefter, did you want to do
22	introductions for the record first, or how do you
23	want to handle it.
24	HEARING OFFICER GEFTER: Yes. Before we
25	start we'll ask the parties to introduce

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1 themselves for the record, starting with the
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- 2 applicant.
- 3 MR. THOMPSON: Allan Thompson, one of
- 4 counsel to PG&E National Energy Group.
- 5 MR. CARROLL: Mike Carroll, Latham and
- 6 Watkins for PG&E National Energy Group.
- 7 MR. HANSCHEN: Peter Hanschen, Morrison
- 8 and Foerster, PG&E National Energy Group.
- 9 MS. SEGNER: Sharon Segner, PG&E
- 10 National Energy Group.
- 11 HEARING OFFICER GEFTER: And for staff.
- 12 MR. OGATA: I'm Jeff Ogata, I'm CEC
- 13 Staff Counsel. Eileen Allen, Project Manager, is
- in the audience right now. And we have some staff
- people here from the Commission.
- 16 HEARING OFFICER GEFTER: And Intervenor
- 17 Cabrillo Power.
- 18 MR. GOLDMAN: Matt Goldman, Livingston
- 19 and Mattesich, for Intervenor Cabrillo.
- 20 MR. VARANINI: Gene Varanini, Livingston
- 21 and Mattesich, for Cabrillo.
- 22 HEARING OFFICER GEFTER: Duke Energy.
- MS. LUCKHARDT: Jane Luckhardt from
- 24 Downey Brand for Duke Energy North America.
- 25 MR. SEEDALL: Mark Seedall, Duke Energy

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1	Noven	America.
_	MOTCII	America.

- 2 HEARING OFFICER GEFTER: And Intervenor
- 3 Holly Duncan.
- 4 MS. DUNCAN: Holly Duncan, mother of an
- 5 asthmatic intervenor.
- 6 HEARING OFFICER GEFTER: And Mr.
- 7 Claycomb.
- 8 MR. CLAYCOMB: William E. Claycomb,
- 9 President, Save Our Bay, Inc., Intervenor.
- 10 HEARING OFFICER GEFTER: Thank you. Can
- 11 people who are sitting in the back hear us? Yes.
- 12 Okay, thank you.
- This morning we're going to take
- 14 evidence on the dual fuel alternatives issue that
- 15 came up last week, and we had intended to hear it
- 16 yesterday, but we ran rather late.
- 17 If there are witnesses on that topic
- 18 available this morning, I understand the applicant
- 19 has a witness, let us go forward with that topic
- 20 first.
- 21 Then we will hear air quality, and then
- 22 we'll hear public health. The entire day is
- 23 dedicated to these topics.
- 24 At the end of the presentation on air
- 25 quality we understand that members of the public

1 may have public comment, and you'll be welcome at

- 2 that point to come forward and address the
- 3 Committee.
- 4 Now, we're ready to go forward on the
- 5 dual fuel issue unless there are some housekeeping
- 6 matters that may be of concern with respect to
- 7 exhibits or any other items at this point.
- 8 MR. GOLDMAN: Ms. Gefter.
- 9 HEARING OFFICER GEFTER: Yes.
- 10 MR. GOLDMAN: It wasn't clear to me last
- 11 night whether or not the two charts that were
- 12 passed out last night to accompany the testimony
- of Mr. Weatherwax were marked into the record.
- 14 As I understand it they are effectively
- 15 errata to the chart that was included in the
- materials that have been marked as exhibit 72.
- 17 HEARING OFFICER GEFTER: That was my
- 18 understanding of those two charts, and that's how
- 19 I marked them. They will be incorporated into
- 20 exhibit 72 as errata if there's no objections from
- any of the other parties.
- 22 (Off-the-record microphone discussion.)
- 23 HEARING OFFICER GEFTER: Are there any
- other housekeeping matters with respect to
- exhibits or other items?

MR. OGATA: Ms. Gefter, yesterday at the
beginning you had announced that you weren't sure
whether SDG&E's testimony exhibit 73 had been
entered into the record, and you had added exhibit
for their prehearing conference statement, with
the statement that you may have to ask them to

come back to sponsor these exhibits.

My records indicate that exhibit 73 was moved into evidence, so I believe at least -- my records aren't the best, but I'm usually pretty good about that. So, I believe that one's moved in.

Now, with respect to exhibit 76 I believe that was an exhibit that you added. And so we were wondering whether or not, especially since I don't believe there was a witness or a signatory with respect to the conference, and, you know, what effect that has with respect to evidence.

So I just wanted to find out from you what part of that you were interested in. And I think Mr. Thompson had indicated that assuming that there are no objections from all the parties, perhaps we could just stipulate that those could be admitted and we wouldn't have to bring San

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1 Diego back.
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- 2 HEARING OFFICER GEFTER: All right.
- Well, I understand exhibit 73 was actually
- 4 received on November 14th, so thank you for that.
- 5 And exhibit 76, I have to look at that
- 6 again. And then indicate to the parties on the
- 7 next, December 4th, our next hearing, whether or
- 8 not we need to receive that into the record.
- 9 Thank you.
- 10 If there's no other housekeeping matter,
- let us go forward on the dual fuel issue.
- 12 MR. OGATA: Excuse me, Ms. Gefter, one
- more thing. I'm sorry, but --
- 14 HEARING OFFICER GEFTER: Oh, I'm sorry.
- MR. OGATA: At the end of the evening
- 16 last night there was also a procedural matter with
- 17 respect to Mr. Filippi's rebuttal testimony. And
- 18 I don't know if we were on the record when you
- announced what we were going to do with that.
- 20 I believe Otay Mesa was going to prepare
- 21 something in writing that would be submitted to
- 22 all the parties. And then there would be cross-
- examination available based on that, I understand,
- 24 at the December 4th. At least that's my
- 25 understanding. I just wanted to confirm with you

1	and	with	the	applicant	that's	correct.
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- 2 MR. HANSCHEN: That's my understanding,
- 3 also, is I believe you said submit the written
- 4 testimony --
- 5 HEARING OFFICER GEFTER: The reporter
- 6 can't hear you.
- 7 MR. HANSCHEN: That's my understanding,
- 8 also is -- my understanding is we're to submit the
- 9 written rebuttal testimony by December 1st.
- 10 HEARING OFFICER GEFTER: That was
- 11 correct. And that was on the record, I believe.
- MR. OGATA: Thank you.
- 13 HEARING OFFICER GEFTER: The witness
- 14 will sit next to the reporter at this point.
- MR. THOMPSON: Thank you, Ms. Gefter.
- 16 Applicant would like to call Mr. Al Williams. Mr.
- Williams has been previously sworn.
- Whereupon,
- 19 ALAN WILLIAMS
- 20 was recalled as a witness herein and having been
- 21 previously duly sworn, was examined and testified
- 22 further as follows:
- 23 DIRECT EXAMINATION
- BY MR. THOMPSON:
- 25 Q Would you please state your name for the

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1 record.
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- 2 A Alan Williams.
- 3 Q Mr. Williams, you are here today
- 4 testifying on the subject of alternatives. You
- 5 have previously testified on certain alternatives.
- 6 Today the ones remaining that are your
- 7 responsibility and the appropriate sections of
- 8 exhibit 1, which is the AFC, are the following:
- 9 section 3.11.3, which is entitled alternative
- 10 technologies and equipment; and section 311-8,
- 11 steam injection.
- 12 Is that a correct summation of your
- 13 testimony for today?
- 14 A Yes, it is.
- 15 Q Thank you.
- MR. THOMPSON: Mr. Williams is tendered
- for cross-examination.
- 18 HEARING OFFICER GEFTER: Does staff have
- 19 cross-examination?
- 20 MR. OGATA: Staff has no questions.
- 21 HEARING OFFICER GEFTER: Intervenor
- 22 Cabrillo.
- MR. GOLDMAN: Could I have a
- 24 clarification as to the sections of the AFC? I'm
- sorry I wasn't writing them down when Mr. Thompson

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said -- there were two sections, I believe?
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- 2 MR. THOMPSON: Yes, 311.3 and 331.8.
- 3 MR. GOLDMAN: Okay, thank you. No, we
- 4 have no cross-examination.
- 5 HEARING OFFICER GEFTER: Does Duke?
- 6 MS. LUCKHARDT: No.
- 7 HEARING OFFICER GEFTER: Do either of
- 8 the other intervenors, Ms. Duncan, Mr. Claycomb?
- 9 MR. CLAYCOMB: No.
- 10 HEARING OFFICER GEFTER: Thank you.
- 11 Thank you, Mr. Williams.
- 12 Are there any other witnesses from any
- party on the topic of dual fuel alternatives?
- We can go forward then on the topic of
- 15 air quality.
- MR. THOMPSON: I believe so.
- 17 HEARING OFFICER GEFTER: All right. Mr.
- 18 Thompson, do you -- Mr. Goldman.
- 19 MR. GOLDMAN: Thank you. As I
- 20 understand it, Eileen Allen of the staff was to
- 21 present testimony and be subject to cross-
- 22 examination on the dual fuel alternative. I
- 23 believe it's on the agenda of the hearing.
- MR. OGATA: Yes, Mr. Goldman is correct.
- 25 That was on the agenda. However, that was not

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1 proposed by staff. And she would not be the
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- 2 appropriate person, as a technical matter, to
- 3 discuss that issue.
- 4 If there's something in the testimony on
- 5 alternatives that she authored, I'm sure it's in a
- 6 very general way, or it might paraphrase some
- other technical person, but I hate to speak for
- 8 her, but I think she would agree. She clearly is
- 9 not qualified to get into any technical aspects of
- 10 dual fuel.
- 11 MR. GOLDMAN: Well, I would like to ask
- 12 her questions about the alternative section of the
- 13 FSA that she did author. And I recognize that
- 14 they are general comments. And, of course, my
- 15 questions will be commensurately general --
- 16 HEARING OFFICER GEFTER: Mr. Goldman,
- 17 you already asked Ms. Allen questions about the
- 18 alternative section. And --
- MR. GOLDMAN: No, no, as a matter for
- 20 the record that is not true. In fact, it was
- 21 deferred to the alternatives section. I did not
- 22 ask her a question about --
- 23 HEARING OFFICER GEFTER: You mean with
- 24 respect to dual fuel.
- MR. GOLDMAN: No. What I asked her

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1 questions about were the executive summary and the
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- 2 introduction that she did author. I did not ask
- 3 her questions about the alternatives section of
- 4 the FSA.
- 5 HEARING OFFICER GEFTER: And why didn't
- 6 you?
- 7 MR. GOLDMAN: Because I was told that
- 8 that would be raised at a different time. That
- 9 was, I think, the very first day of our
- 10 evidentiary hearings on the 13th of November.
- 11 HEARING OFFICER GEFTER: Well, the
- 12 Committee has asked staff to come forward with
- 13 additional information on alternatives with
- 14 respect to smaller plant alternatives and other
- 15 technology alternatives, such as microturbines, as
- 16 Ms. Duncan has discussed.
- 17 That testimony will be due on December
- 18 1st. We've already talked about that. I would
- 19 like to defer any further discussion on
- 20 alternatives until we have all of staff's
- 21 testimony in on alternatives. And let's defer
- that to December 4th.
- MR. GOLDMAN: All right, then. And for
- 24 the record I don't know that my questioning will
- deal with the specific concerns that Ms. Duncan

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1 had, but to the extent that we can have all the
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- 2 cross-examination at one time, I think that's
- 3 fine.
- 4 HEARING OFFICER GEFTER: We will receive
- 5 staff's additional testimony December 1st. You'll
- 6 have an opportunity to look at it. And then we'll
- 7 discuss the entire topic on December 4th.
- 8 MR. GOLDMAN: Very well.
- 9 PRESIDING MEMBER LAURIE: Ms. Gefter,
- 10 before we start getting witnesses, I would request
- 11 that we get a summary of the parties', of their
- 12 intentions regarding witnesses to be presented, so
- we can gauge the day accordingly.
- Just five minutes on summarizing today's
- 15 activities, and the witnesses that each party
- intends to present on the issues.
- 17 MR. CARROLL: Applicant will be
- 18 presenting one witness each on the topics of air
- 19 quality and public health. We expect the direct
- 20 testimony to be very short, less than a minute for
- 21 each.
- There is a possibility that we will want
- 23 to present a rebuttal witness in response to Mr.
- 24 Rubenstein's testimony, but that is something we
- 25 have not yet determined. If we do present that

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witness, it would be relatively short.
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- 2 HEARING OFFICER GEFTER: Staff.
- 3 MR. OGATA: Staff has one witness in the
- 4 area of air quality and one witness in the area of
- 5 public health. And we will also be sponsoring the
- 6 testimony of the Air District with respect to the
- 7 final determination of compliance.
- 8 And the District has been very
- 9 cooperative in providing a number of witnesses
- 10 from their staff today to respond to whatever
- 11 questions the Committee may have in this area.
- 12 HEARING OFFICER GEFTER: Thank you.
- 13 Cabrillo.
- MR. VARANINI: We have a witness, Gary
- 15 Rubenstein, who will basically discuss the direct
- impacts on the air resource from the relationship
- 17 between the Otay project and the operations of --
- induced operations on Cabrillo and on the South
- 19 Bay Plants.
- 20 If Mr. Caldwell is going to be called
- 21 today, we have substantial questions of him on his
- 22 testimony which effectively and substantially is
- 23 advice to us. We'd like to have a discussion
- about that on the record.
- 25 And then we have very few questions for

1 the staff and for any of the local officials who

- 2 might be called today.
- 3 HEARING OFFICER GEFTER: Duke.
- 4 MS. LUCKHARDT: We will be asking some
- 5 questions of Mr. Rubenstein to bring out some
- 6 information regarding the South Bay Power Plant
- 7 potential impacts.
- 8 HEARING OFFICER GEFTER: Intervenors Ms.
- 9 Duncan?
- 10 MS. DUNCAN: I am the only witness, and
- 11 all of my information has been submitted as
- 12 documents. But I will have some questions based
- on what I've learned in the past few days of Mr.
- 14 Layton. I will have questions possibly of our Air
- 15 Pollution Control District. And possibly Mr.
- 16 Rubenstein.
- 17 HEARING OFFICER GEFTER: Mr. Claycomb.
- 18 MR. CLAYCOMB: Save Our Bay will have
- 19 probably five minutes of questions best be asked
- 20 during the public health portion. But if the
- 21 hearing drags on, we do have to leave at 5:00. So
- 22 we could move them up to air quality because
- they're so closely related.
- 24 MR. VARANINI: Ms. Gefter, I left one
- 25 thing out. If Mr. Caldwell testifies we would

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1 like to recall Mr. Weatherwax for two questions,
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- 2 since he is a risk assessment expert. We
- qualified him in that field yesterday, and Mr.
- 4 Caldwell, in his advice to us, has some
- 5 suggestions that have risk assessment implications
- 6 for their implementation.
- 7 HEARING OFFICER GEFTER: That's with
- 8 respect to the public health section?
- 9 MR. VARANINI: I think he's testifying,
- 10 I'm not quite sure what exactly the testimony is,
- 11 what it could be typified as, but it involves
- fuel, the relationship between what happens at
- 13 Otay and then fuel options at the existing power
- 14 plants.
- 15 HEARING OFFICER GEFTER: How long do you
- 16 believe your direct testimony of Mr. Rubenstein
- 17 will take?
- 18 MR. VARANINI: I think it will take
- 19 about 20 minutes.
- 20 HEARING OFFICER GEFTER: All right. Why
- 21 don't we get started. We do hope to end by 5:00,
- 22 that is on the schedule. And we intend to keep to
- that schedule.
- Mr. Carroll, are you ready to proceed
- 25 for the applicant?

1	MR.	CARROLL:	We	are.	The	applicant
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- 2 would like to call Mr. Perry Fontana.
- 3 HEARING OFFICER GEFTER: Mr. Fontana,
- 4 come up and be sworn by the reporter.
- Whereupon,
- 6 PERRY FONTANA
- 7 was called as a witness herein and after first
- 8 being duly sworn, was examined and testified as
- 9 follows:
- 10 DIRECT EXAMINATION
- 11 BY MR. CARROLL:
- 12 Q Mr. Fontana, would you please state your
- 13 name for the record.
- 14 A Yes, my name is Perry Fontana.
- 15 Q And what is your place of employment?
- 16 A I'm employed by URS Corporation.
- 17 Q And could you briefly describe your
- 18 responsibilities with regard to the Otay Mesa
- 19 Project?
- 20 A Yes, I am the lead air quality analyst
- 21 for the project. I prepared the air quality
- 22 section of the AFC including the analysis of the
- 23 baseline data and the air quality impact
- 24 assessment based on emissions data provided by the
- 25 project engineers.

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1 I also prepared the authority to
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- 2 construct determination of compliance documents
- 3 for submittal to the San Diego Air Pollution
- 4 Control District.
- 5 Q And your prepared testimony previously
- filed in this matter indicates that you are
- 7 sponsoring a number of exhibits, including
- 8 sections 1.8.2, 5.2 and appendix I of exhibit 1,
- 9 which is the AFC, the authority to construct
- 10 permit application to the San Diego Air Pollution
- 11 Control District exhibit 2.
- 12 Exhibit 3, supplement to project
- 13 dispersion modeling. Exhibit 11, response to data
- 14 request 26. Exhibit 21, supplement to the ATC
- 15 application. Exhibit 40, the preliminary
- determination of compliance. Exhibit 58, comments
- 17 to the air quality preliminary staff assessment.
- 18 Exhibit 61, response to intervenors of which you
- 19 are a co-sponsor.
- 20 Are you sponsoring the exhibits that I
- 21 just listed this morning?
- 22 A Yes, I am.
- 23 Q And could you briefly summarize your
- 24 testimony?
- 25 A Yes, the analysis, the air quality

1 impacts from the Otay Mesa Project show that the

- 2 project will have minimal impacts on air quality
- 3 in the San Diego region.
- 4 After considering the air quality
- 5 improvements associated with the project's
- 6 emission reduction credit package, and looking at
- 7 the results of the air quality impact assessment,
- 8 I believe there will be no adverse air quality
- 9 impacts. And that the project will comply with
- 10 all applicable laws, ordinances, regulations and
- 11 standards.
- 12 Q Thank you. Does that conclude your
- 13 testimony?
- 14 A Yes, it does.
- MR. CARROLL: Mr. Fontana is tendered
- 16 for cross-examination.
- 17 HEARING OFFICER GEFTER: Does staff have
- 18 cross-examination?
- MR. OGATA: Staff has no questions.
- 20 HEARING OFFICER GEFTER: Intervenor
- 21 Cabrillo.
- MR. GOLDMAN: Just a few questions.
- 23 CROSS-EXAMINATION
- BY MR. GOLDMAN:
- 25 Q Mr. Fontana, I understand that Otay Mesa

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is to use exclusively natural gas, is that

- 2 correct?
- 3 A That's correct.
- Q Did you do any analysis of the existing
- or projected natural gas supply for the San Diego
- 6 region in connection with your analysis?
- 7 A No, I did not. That was not part of my
- 8 scope on this project.
- 9 Q So, as I understand it, the scope of
- 10 your project was on air quality as opposed to
- 11 natural gas supply?
- 12 A Yes, that's correct.
- 13 Q in terms of that air quality analysis,
- 14 did you do any analysis of the air emissions
- 15 impact of natural gas curtailment on existing
- 16 plants that might be caused by Otay Mesa's
- 17 operation on natural gas?
- 18 A No, I did not.
- 19 Q And why was that?
- 20 A Based on the information provided by the
- 21 project's gas reliability experts it was not a
- 22 reasonable scenario to analyze.
- 23 Q Do you recall the criteria that you used
- 24 to determine whether or not the scenario was
- reasonable or not reasonable to analyze?

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1 A The information provided by the
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- 2 project's gas reliability experts indicated that
- 3 there was -- that the Otay Mesa project would not
- 4 contribute to any curtailments that would require
- 5 such an analysis.
- 6 Q In connection with your review of the
- 7 gas reliability expert's information, did you
- 8 review any modeling analysis?
- 9 MR. CARROLL: I'm going to object. I
- 10 don't think Mr. Fontana testified that he reviewed
- 11 the analysis conducted by the gas reliability
- 12 experts. I believe what he said is that he relied
- on their conclusions.
- 14 HEARING OFFICER GEFTER: Okay.
- 15 BY MR. GOLDMAN:
- 16 0 Is that accurate?
- 17 A Yes, I did not review any modeling. I
- 18 relied on the conclusions.
- 19 Q Okay. So in terms of relying on the
- 20 conclusions do I understand you correctly that you
- 21 didn't look at the underlying data, but rather
- just the conclusions?
- 23 A No, I did not look at the underlying
- 24 data.
- 25 Q Okay. If I could direct you to exhibit

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1 1, the AFC, within section 5.2 air quality, at
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- 2 page 5.2-27, in section 5.2.3 environmental
- 3 consequences, in the second and last paragraph of
- 4 that subsection there's a discussion about
- 5 California's deregulated power market.
- 6 And then a sentence that I will read to
- 7 you and ask you a couple questions about. Quote,
- 8 "The California ISO has identified the San Diego
- 9 area as a location where power generation is
- 10 highly needed to maintain system reliability."
- 11 My question is what did you mean by that
- 12 statement?
- 13 A That statement was provided by the
- 14 project engineers.
- 15 Q What is your understanding of the
- 16 statement?
- 17 A My understanding of the statement is
- that there's a need for the project.
- 19 O And in connection with the need for the
- 20 project in terms of system reliability what, if
- any, is your understanding?
- 22 A I did not perform any analysis of system
- 23 reliability.
- Q Okay, so do I understand you correctly
- 25 that that was a statement that was put in here by

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1 other members of the team?
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- 2 A Yes, that's correct.
- Q Okay.
- 4 MR. GOLDMAN: I have no further
- 5 questions.
- 6 HEARING OFFICER GEFTER: Duke Energy.
- 7 CROSS-EXAMINATION
- 8 BY MS. LUCKHARDT:
- 9 Q I have one question and you can tell me
- if this is something that you're sponsoring. Are
- 11 you sponsoring Otay Mesa Generating Company's
- responses to comments of Holly Duncan, Intervenor?
- 13 A I am a co-sponsor of that; prepared
- 14 certain of the responses, not all of them.
- 15 Q Okay. Did you prepare the response to
- 16 comment HD-2?
- 17 A I don't have the comment in front of me.
- 18 If you could read it, please?
- 19 HEARING OFFICER GEFTER: What exhibit
- 20 are you referring to?
- 21 MS. LUCKHARDT: I am sorry to tell you
- that I don't know exactly which exhibit this is.
- 23 Maybe the applicant can help me identify which
- exhibit this is a part of. I think it was with
- 25 the initial large filing that you submitted.

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1 MS. DUNCAN: It was part of their
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- 2 prehearing conference statement.
- 3 MS. LUCKHARDT: It was a part of the
- 4 prehearing conference statement?
- 5 MS. DUNCAN: For the applicant.
- 6 HEARING OFFICER GEFTER: Exhibit 77, Mr.
- 7 Thompson?
- 8 MR. CARROLL: I apologize, we've
- 9 responded to a number of comments of the
- intervenors at a number of different times, so let
- 11 us just sort out which of the --
- 12 MS. LUCKHARDT: Okay, it doesn't seem to
- have a date on it. At least on the copy that I
- 14 have. There is a title, it's part of a group of
- 15 applicant responses to comments of, and then
- there's the AARP, American Lung Association,
- 17 comments of Holly Duncan.
- MR. CARROLL: Yes, it's a part of
- 19 exhibit 77.
- 20 MS. LUCKHARDT: Okay, great. So you
- 21 don't have a copy of that? Maybe I could show you
- the statement, and you could tell me whether
- 23 that's a part of your --
- MR. FONTANA: Yeah, and I may have it
- 25 here, I just want to make sure we're looking at

- 1 the same --
- MS. LUCKHARDT: You may have it there?
- 3 MR. FONTANA: -- at the same comment.
- 4 BY MS. LUCKHARDT:
- 5 Q Okay, I'm looking at comment HD-2, it's
- 6 what it's called. It starts off with Commissioner
- 7 Robert A. Laurie's third revised scheduling order.
- 8 A Okay, what I have is a copy of something
- 9 from my files, so I would need to knwo what the
- 10 exact comment, to make sure I'm looking at the
- 11 same comment.
- 12 Q Okay. I think what Mr. Allen just
- 13 presented to you is probably the same document I'm
- 14 looking at. And it's about -- it doesn't have
- page numbers on it, so you just have to flip
- 16 through. About a third of the way through there's
- a separating page that says Holly Duncan.
- 18 HEARING OFFICER GEFTER: Off the record.
- 19 (Off the record.)
- 20 HEARING OFFICER GEFTER: Back on the
- 21 record.
- BY MS. LUCKHARDT:
- Q Okay, comment HD-2, did you prepare that
- 24 response?
- 25 A No, I did not.

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1 Q Okay.
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- 2 (Laughter.)
- 3 MR. FONTANA: But I know where the
- 4 comment is now, thank you.
- 5 (Laughter.)
- 6 MS. LUCKHARDT: Okay, I have no further
- 7 questions.
- 8 HEARING OFFICER GEFTER: Ms. Duncan, do
- 9 you have questions of the witness?
- 10 MS. DUNCAN: Yes, I do. I'll try to
- 11 make it very brief.
- 12 CROSS-EXAMINATION
- 13 BY MS. DUNCAN:
- 14 Q I would like to address the modeling
- 15 that you did.
- 16 A Yes.
- 17 Q And I also want to refer to that under,
- 18 I guess what I call the new scenario that has
- 19 emerged here in the past few days, where we have
- 20 identified some transmission problems, so there
- 21 are scenarios that have been presented that
- 22 possibly Otay Mesa Generation Project would be not
- working at full load.
- 24 Can you please tell me if all of your
- 25 models were based on full load or reduced load?

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1 If they were based on reduced load, how do the
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- 2 emissions change? Or do they change?
- 3 A Yes. The modeling was based on a wide
- 4 range of loads, based on emissions and stack
- 5 characteristics provided by the project engineers.
- 6 The emissions do change for certain pollutants
- 7 with load, and in some cases the maximum impacts,
- 8 not necessarily the maximum emissions, would occur
- 9 under loads other than full loads for pollutants
- 10 such as particulate matter.
- 11 The emissions are really a function of
- 12 flow, so that at 100 percent loads you would have
- the maximum emissions.
- 14 Q So my understanding is on a lower load
- 15 you'd have less emissions of particulate matter,
- for example, is that what you're saying?
- 17 A Yes, that is my understanding from the
- 18 project engineers.
- 19 Q Can you tell me which modeling scenarios
- 20 you worked with to determine the insignificant
- impact to San Diego's air quality?
- 22 A For all pollutants or a specific
- 23 pollutant?
- Q Each one, if necessary. How did you
- 25 arrive at that determination, I guess is my

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1 question.
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- 2 A Okay.
- 3 Q I have in my notes here you said that
- 4 overall you believed that this project will have
- 5 minimal impacts to air quality in San Diego
- 6 County.
- 7 I'm trying to understand, since at both
- 8 EPA and ARB you were still, as a power plant,
- 9 considered a major source polluter.
- 10 I'm trying to reconcile as a lay person
- 11 here, a statement like that. For me, it's a major
- 12 disconnect that a power plant can have a minimal
- impact to the air quality in my neighborhood.
- 14 I'm trying to understand the applicant's
- position which is consistent that there are no
- 16 significant impacts to air quality in my
- 17 community.
- 18 PRESIDING MEMBER LAURIE: Ms. Duncan,
- 19 let's do this, let's take a --
- 20 BY MS. DUNCAN:
- 21 Q So which model did you work with to
- 22 arrive at that conclusion?
- Does that help?
- 24 PRESIDING MEMBER LAURIE: Well, I was
- 25 trying to get you to just restate your question.

1	MR. FONTANA: If it pleases the
2	Commission I think I can try to address her
3	question and hopefully provide some clarification
4	on that.
5	The determination of the power plant as
6	a major source under the new source review
7	regulations is based on the quantity of its
8	emissions.
9	Those emissions were then modeled using
10	dispersion modeling techniques for pollutants such
11	as carbon monoxide and nitrogen oxides. The model
12	was based on the industrial source complex model.
13	For particulate matter modeling there were there a
14	number of models run, including the ISC model, the

15 CT screen model, and ultimately the AirMod model.

16 The results of those models as presented

17 in the AFC show that the project's impacts would

18 be below significance criteria established by the

19 EPA and the San Diego Air Pollution Control

20 District. And that's the basis for our

22 BY MS. DUNCAN:

21

conclusion.

Q So part of your decision was based on what shows in my testimony as possibly a weak criteria level at my local Air Pollution Control

1 District? That their threshold levels are, shall

- we say, not as protective as other air pollution
- 3 control districts in the state?
- 4 A I would refer that question --
- 5 Q That was part of your criteria?
- 6 A -- to the District. The criteria was
- 7 the significance levels of the District --
- 8 MR. CARROLL: I'm going to object to the
- 9 question, it assumes facts not in evidence.
- 10 There's no indication that the standards in San
- 11 Diego are any different from the standards applied
- 12 throughout the rest of the state and the country.
- 13 HEARING OFFICER GEFTER: You may ask
- that question of the Air District.
- MS. DUNCAN: I would like to object to
- 16 what the applicant objected to. I have a document
- 17 that documents that our standards are not what
- other standards are in the state as part of my
- 19 testimony.
- 20 HEARING OFFICER GEFTER: Your objection
- is noted. Also, Mr. Carroll's objection is
- 22 sustained. And you may ask the question of the
- 23 Air District.
- Go on to your next question.
- 25 //

1	RV	MC	DUNCAN:
_	$_{\rm D}_{\rm I}$	1,10.	DOMCTM.

- 2 O In a less than full load situation for
- 3 this project what emissions might we want to be
- 4 concerned with that are not documented in the AFC?
- 5 A As I stated, the modeling covered a wide
- 6 range of load conditions, and under no load
- 7 condition were the impacts predicted to be above
- 8 the significance levels.
- 9 What's presented in the AFC are the
- 10 maximum predicted impacts.
- 11 A At all load levels?
- 12 Q At all load levels that we analyzed,
- 13 yes.
- 14 Q What load levels did you analyze?
- 15 A The load levels that were analyzed
- ranged between 50 and 100 percent load.
- 17 Q If they were less than 50 did you
- 18 analyze that?
- 19 A We did not analyze that. Based on
- 20 information from the project engineer that was not
- 21 a reasonable scenario.
- MS. DUNCAN: That answers my questions,
- thank you.
- 24 HEARING OFFICER GEFTER: Thank you. Mr.
- 25 Claycomb, do you have questions?

1 MR. CLAYCOMB: No questions on this

- 2 subject.
- 3 HEARING OFFICER GEFTER: Mr. Carroll, do
- 4 you have redirect of your witness?
- 5 MR. CARROLL: No, we don't.
- 6 HEARING OFFICER GEFTER: Do you want to
- 7 move those exhibits?
- 8 MR. CARROLL: Yes, at this time we would
- 9 like to move exhibit 2, 3, 11, 21, 40, 58, 61 and
- that portion of exhibit 77 that consists of Mr.
- 11 Fontana's prepared testimony.
- 12 HEARING OFFICER GEFTER: 77 will be
- 13 moved in its entirety at the conclusion of all the
- 14 hearings.
- 15 Is there any objection to the admission
- into the record of the documents that Mr. Carroll
- 17 identified?
- 18 Hearing no objection, those documents
- 19 are now received into the record. Thank you.
- 20 Does the applicant have an additional
- 21 witness on air quality?
- MR. CARROLL: We do not.
- 23 HEARING OFFICER GEFTER: Thank you, Mr.
- Fontana.
- MR. FONTANA: Thank you.

1	HEARING	OFFICER	GEFTER:	Staff.

- 2 MR. OGATA: Staff calls Matthew Layton.
- 3 He needs to be sworn.
- 4 Whereupon,
- 5 MATTHEW LAYTON
- 6 was called as a witness herein and after first
- 7 being duly sworn, was examined and testified as
- 8 follows:
- 9 DIRECT EXAMINATION
- 10 BY MR. OGATA:
- 11 MR. LAYTON: Good morning. My name is
- 12 Matthew Layton. I'm with the California Energy
- 13 Commission. I work in the air quality unit of the
- 14 Environmental Office.
- I prepared the final staff assessment
- 16 for the Otay Mesa project. A quick summary of the
- 17 FSA that I prepared:
- 18 The project is a 500 megawatt project
- 19 located in San Diego. The project will operate
- 20 over a range of loads. The applicant did look at
- 21 the range of loads and modeled those. The models,
- in my mind, are very conservative, and did arrive
- 23 at a reasonable estimation of the impacts of the
- 24 project over those load ranges, and for those
- emission rates.

They also did analyze the PM10 emissions
from the project using an AIROMOD which is a new
modeling protocol, or a new model actually, trying
to get the project impacts below the significance
level.

When they first modeled it the project

When they first modeled it the project impacts were above the significance level. They moved the two stacks together and raised them, which will decrease the impacts. And also ran the AIROMOD which is, we hope, a better model, to come up with more refined modeling for the project.

The PM10 impacts for the project were below the significance level, and therefore satisfy the District's rules and regs.

However, the project, in satisfying the District's rules and regs, was only required to provide NOx offsets. The applicant went to a great effort to come up with NOx offsets in the area.

They are retrofitting some marine vessels in the harbor. They are replacing some trash trucks in the area with natural gas trash trucks. These are providing NOx offsets which the EPA and CARB and the District have all worked together to agree that they do provide NOx

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1 offsets. The applicant is providing these to
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- 2 satisfy the District requirements.
- We also looked at the PM10 impacts from
- 4 the project. The project emits SOx, VOCs,
- 5 volatile organic compounds, and PM10, all of which
- 6 I guess excuse me, PM10 and other pollutants are
- 7 PM10 precursors do contribute to an existing
- 8 violation of the state PM10 standard for 24 hour.
- 9 And we wanted to pursue additional mitigation
- 10 to address those PM10 impacts.
- 11 The area is very limited for offsets.
- We worked with the applicant to look at other
- alternatives rather than just buying offsets in
- 14 the market.
- We also hope to get PM2.5 offsets rather
- 16 than PM10 offsets, because the pollution from the
- 17 project, the majority of it is PM2.5.
- 18 What we have finally arrived at, and the
- 19 applicant and the staff have come to an agreement
- 20 today, is the mitigation fee. This mitigation fee
- 21 will be provided to the District.
- We would prefer that the money go to the
- lower emission school bus program, but we have
- left the condition somewhat open to allow the
- 25 money to also go to the Carl Moyer Program, or

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1
        perhaps another program which would look at
        reductions of PM10 and PM10 precursors.
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- We believe that the lower emission 3 4 school bus program or the Carl Moyer Program 5 provide emission reductions in the neighborhoods at the receptor level, as opposed to perhaps in a remote area of the County where perhaps a dirt 8 road would be paved or something. We believe that provides mitigation to the extent feasible. 9
 - On a ton-for-ton basis, the PM10 reductions from the lower emissions school bus program will not be equivalent to the PM10 emissions from the project. But we believe it does provide real reductions of PM10 and provides health benefits and mitigates the project to the extent feasible.
- 17 I guess we have agreed on language today for condition 75 that differs slightly from what 18 19 was in the FSA. And I guess we will enter that into the record. 20
- 21 HEARING OFFICER GEFTER: Do you have a 22 copy?
- 23 MR. OGATA: Ms. Gefter, we are drafting that as we speak, and we will provide final 24 25 language once the parties have had a chance to

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1 look at it.
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- 2 BY MR. OGATA:
- 3 Q Mr. Layton, your testimony is contained
- 4 in staff's final staff assessment part two, which
- is marked as exhibit 65, is that correct?
- 6 A That's correct.
- 7 Q And you were the author of that?
- 8 A That's correct.
- 9 Q You also have authored, marked as
- 10 exhibit 88, staff's additional air quality
- 11 testimony which was response to public and agency
- 12 comments, and you're the author of that, as well?
- 13 A That's correct.
- MR. OGATA: We have no further questions
- 15 at this time. He is available for cross-
- 16 examination.
- 17 PRESIDING MEMBER LAURIE: Ms. Gefter, I
- have a question before we get to cross.
- Mr. Layton, summarize for me the Air
- 20 District's position on PM10.
- MR. LAYTON: My understanding of their
- 22 position, the basin is nonattainment for the state
- 23 PM10 standards. It is attainment for the federal
- PM10 standards.
- The basin has pretty much been leveled

with respect to the number of violations per year

- over the last 10 or 15 years. The impacts have
- 3 not gone up or down, and the inventories have
- 4 remained relatively flat, as well.
- I think that's a credit to the District
- 6 because there has been growth in the area, and
- 7 they've managed to keep the PM inventory
- 8 relatively constant.
- 9 However, there are continued violations
- of that state standard and we look at that as a
- 11 significant impact.
- 12 The District, however, is not
- necessarily required to achieve the state PM10
- 14 standard. The legislation is out there that
- 15 identified the standard, however did not provide a
- date certain for attainment of that standard.
- 17 PRESIDING MEMBER LAURIE: Is the Air
- 18 District the governmental agency mandated to
- 19 enforce the state's air rules and regulations?
- MR. LAYTON: Yes.
- 21 PRESIDING MEMBER LAURIE: And is it this
- 22 position in this case that given the offsets,
- 23 given the credits obtained on all emissions that
- 24 the emissions are satisfactorily mitigated,
- including PM10?

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1 MR. LAYTON: I would say that's not --
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- 2 no. The project has certain emission levels above
- 3 which they are, in their new source review rule,
- 4 are required to require offsets, below which they
- 5 are not required to require offsets.
- 6 This project did not trigger offset
- 7 requirements for PM10 per the District rules,
- 8 which is the new source review rule.
- 9 But that new source review rule is
- designed for attainment of the federal standards.
- 11 PRESIDING MEMBER LAURIE: Well, I guess
- 12 what I'm getting at is does the state agency
- 13 mandated to enforce air emission rules asking for
- 14 additional mitigation for PM10 emissions?
- MR. LAYTON: I'm sorry, I didn't
- 16 understand your question.
- 17 PRESIDING MEMBER LAURIE: Okay, well,
- 18 let me try it again.
- MR. LAYTON: Okay.
- 20 PRESIDING MEMBER LAURIE: Staff is
- 21 asking for mitigation over and above what the
- 22 local Air District is asking for.
- MR. LAYTON: Correct.
- 24 PRESIDING MEMBER LAURIE: And I'm asking
- 25 what the basis of that is. That is, you have the

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- 2 saying this is the impact that we see, and this is
- 3 the mitigation that we feel is necessary.
- 4 On what basis is staff asking for
- 5 additional mitigation?
- 6 MR. LAYTON: On the basis of the state
- 7 standard. The District's new source review rule
- 8 is designed to attain and maintain compliance with
- 9 the federal ambient air quality standards.
- 10 In this case we're talking about the
- 11 state ambient air quality standard.
- 12 HEARING OFFICER GEFTER: Are the state
- 13 ambient air quality standards more stringent than
- 14 the federal?
- MR. LAYTON: Significantly.
- 16 PRESIDING MEMBER LAURIE: Okay. And
- 17 staff considers it their responsibility to enforce
- 18 the state standards?
- MR. LAYTON: We consider the project's
- 20 contribution to an existing violation of the state
- 21 standard to be significant, yes.
- 22 PRESIDING MEMBER LAURIE: Okay.
- 23 HEARING OFFICER GEFTER: With respect to
- the condition 75, does staff feel comfortable
- describing the parameters of the changes to the

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1	Committee	at	thig	noint?

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2 MR. LAYTON: Condition 75 was a 3 requirement that the applicant, Otay Mesa 4 Generating Company, surrender \$1.7 million to the 5 Air District to be used in one of these programs, 6 the lower emission school bus program or the Carl Moyer Program, or another program that will reduce 8 PM10 and PM10 precursors in the air basin. 9 We have changed that to come to a number of \$1.2 million. We've also changed when the 10 money will be surrendered. 600,000 will be 11 12 surrendered upon delivery of the first combustion 13 turbine to the site. And then the second 600,000, 14 second and last payment of 600,000 will be 15 surrendered six months after delivery of the 16 combustion turbine. 17 We've also placed in there, which was 18

We've also placed in there, which was not in the original FSA, but we have added some language trying to provide a preference to school districts in the area. There's a Sweetwater High School District, and then several elementary school districts, the San Ysidro, the South Bay, the Chula Vista, which are all close to the project. Therefore those children might be most affected by the project emissions, and also by the

1	school	buses.

- 2 HEARING OFFICER GEFTER: Does this
- 3 proposal replace the applicant's proposal to pave
- 4 roads?
- 5 MR. LAYTON: Yes.
- 6 HEARING OFFICER GEFTER: So the road
- 7 paving is no longer on the table?
- 8 MR. LAYTON: No.
- 9 HEARING OFFICER GEFTER: Staff, do you
- 10 have any further questions of your witness?
- 11 MR. OGATA: No, not at all. I can move
- 12 his testimony, exhibit 88, into the record at this
- 13 time. Staff's FSA part two will be moved in after
- 14 we've had testimony on the other two areas.
- 15 HEARING OFFICER GEFTER: All right, I'm
- going to ask the parties if they have cross-
- examination before we move the exhibit.
- Does the applicant have cross-
- 19 examination of the witness?
- 20 MR. CARROLL: No. We just wanted to
- 21 clarify something. I believe that the question
- 22 that was asked a moment ago was, so the road
- paving proposal is no longer on the table, and the
- 24 answer to that was no. Which was a negative to a
- 25 negative.

1 I just want to clarify, the road paving 2 proposal is not currently on the table, except to 3 the extent that it serves as a surrogate for the determination of the fee. So we are not planning 5 to do road paving at this point. HEARING OFFICER GEFTER: Do you have any cross of the witness aside from that comment? 8 MR. CARROLL: No, we do not. Thank you. 9 HEARING OFFICER GEFTER: Cabrillo Power, 10 do you have cross-examination of the witness? 11 MR. GOLDMAN: Yes, we do. CROSS-EXAMINATION 12 13 BY MR. GOLDMAN: 14 Mr. Layton, I have several questions to

Q Mr. Layton, I have several questions to ask of you regarding the FSA part two, the air quality section, which you authored. It's been identified as exhibit 65. It might be helpful if you have a copy in front of you, and specifically page 17 of the air quality section.

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At the very bottom of the page there's a statement, quote, "recent concerns about electricity and natural gas supplies in the San Diego area have raised the likelihood of either the Encina or South Bay power plants switching to fuel oil for limited intervals."

1 And then there is a discussion that goes

- on for another couple of sentences.
- 3 MR. CARROLL: I'm sorry, what page of
- 4 the --
- 5 MR. GOLDMAN: 17.
- 6 MR. CARROLL: Thank you.
- 7 BY MR. GOLDMAN:
- 8 Q What is the basis of the recent concerns
- 9 that you report in this section?
- 10 A I think that's based on the testimony of
- 11 Bill Wood.
- 12 Q And where is that reflected? Is that
- 13 exhibit appendix B or appendix A that you're
- 14 referring to?
- 15 A I believe Mr. Wood's testimony is
- 16 appendix A.
- 17 Q Okay. In connection with this
- 18 statement, did the staff do any quantitative
- 19 analysis of the likelihood of either Encina or
- 20 South Bay switching to fuel oil?
- 21 MR. OGATA: Excuse me, Mr. Goldman, when
- you say staff, are you asking if Bill Wood or Mr.
- 23 Layton specifically did that analysis?
- MR. GOLDMAN: Anyone on staff.
- MR. OGATA: Okay.

1 MR. LAYTON: I did not do that analysis.

- 2 BY MR. GOLDMAN:
- 3 Q Okay, do you know if anyone on staff
- 4 did?
- 5 A I think you've had to ask Mr. Wood how
- 6 he arrived at this conclusions.
- 7 Q Okay. Well, the question, if I
- 8 understand your answer correctly, you're basically
- 9 saying that this comment basically reflects your
- 10 understanding of Mr. Wood's analysis in appendix
- 11 A, correct?
- 12 A Correct.
- 13 Q All right. So am I correct in assuming
- that if I were to ask -- if any quantitative
- analysis was done regarding what might be the
- limited intervals that are referenced here in
- 17 terms of the likelihood of either Encina or South
- 18 Bay power plants switching to fuel oil, you would
- 19 direct me to Mr. Wood, is that correct?
- 20 A That's correct.
- 21 Q In connection with the air quality
- 22 analysis did the curtailment of natural gas supply
- 23 switch last week during these evidentiary hearings
- 24 causing Encina and South Bay to burn fuel oil
- 25 affect these concerns reflected here as to

1 potential air impacts of increased fuel burning?

- 2 A I don't testify to air impacts, I
- 3 testify to the air emissions will change if fuel
- 4 oil is used.
- 5 Q In terms, though, of any change, in
- 6 terms of an increase, does your analysis include
- 7 any mitigation measures?
- 8 A No.
- 9 Q And why is that?
- 10 A Because I did not do any impact analysis
- 11 to determine if there are any impacts. All I was
- 12 suggesting is that if fuel oil is used there is a
- 13 likelihood that PM10 emissions and PM10 precursor
- 14 emissions will increase.
- 15 As I had stated to Commissioner Laurie,
- the area is nonattainment for PM10, has been
- 17 relatively flat with respect to the inventory and
- the number of violations of the state standard.
- The additional use of fuel oil perhaps
- 20 could be a negative trend, but I don't know the
- 21 significance, because I don't know the duration or
- 22 the frequency, or the season for which these fuel
- oil burns will occur.
- Q I think you indicated three factors,
- 25 duration, frequency and what was the last one?

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1 A Season.
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- Q And season. Do you know -- well, why
- 3 didn't you do any analysis of those three factors?
- 4 A From the air quality perspective they're
- 5 not part of the project.
- 6 Q Is it your understanding that the impact
- of Otay Mesa's operations utilizing natural gas in
- 8 connection with the possibility of increased
- 9 episodes of curtailment and fuel burning at
- 10 existing plants does not have a significant impact
- 11 on air quality?
- MR. CARROLL: I'm going to object to
- this line of questioning. These are really gas
- 14 reliability questions not air quality questions.
- 15 And we've had extensive testimony from staff
- 16 experts on gas reliability, and --
- 17 MR. GOLDMAN: The question --
- 18 MR. CARROLL: -- this is not a gas
- 19 reliability witness.
- 20 MR. GOLDMAN: I agree that this is not a
- 21 gas reliability witness, and this is not a gas
- 22 reliability question. I'm asking him about air
- 23 impacts that are direct results of clearly what is
- 24 the underlying predicate, which is the undisputed
- issue about potential shortages of natural gas.

1	We're not talking about reliability
2	right now at all. We're talking about the air
3	impacts of what's already been discussed, which is
4	the potential for unreliable supply of natural
5	gas.
6	HEARING OFFICER GEFTER: Mr. Carroll's
7	objection is overruled. The witness may answer
8	the question.
9	MR. LAYTON: I did not do modeling of

9 MR. LAYTON: I did not do modeling of
10 Encina or South Bay stacks with either natural gas
11 or fuel oil. So how those impacts might change
12 for those particular projects I don't know.

The effect, again what I was trying to bring forward was this area is nonattainment for PM10, and currently has been very flat for PM10 inventory.

If fuel oil use does increase that could affect the background of PM10 levels. I don't know how much it could or would affect the background levels. Again, it depends on the frequency, the duration and the season in which these fuel oil burns occur.

Currently those sources are permitted, and they are permitted to burn fuel oil. So I think obviously you could ask the District what

the ramifications of fuel oil use in a permitted

- 2 source is.
- 3 BY MR. GOLDMAN:
- 4 Q Is it your understanding that area of
- 5 analysis is the sole responsibility of the Air
- 6 District?
- 7 A I'm not sure what you mean by your
- 8 question.
- 9 Q Well, if I understood you correctly you
- 10 indicated that you did not analyze the duration,
- 11 frequency or season of fuel oil burning as a
- 12 possible consequence of the operation of Otay
- 13 Mesa's impact on natural gas supply. And
- indicated to me that perhaps I should inquire of
- the Air District in terms of that type of
- 16 analysis. Did I understand you correctly?
- 17 A That's correct.
- 18 Q Okay, did you direct me to the Air
- 19 District because it's your understanding that the
- 20 Air District has sole responsibility for analyzing
- 21 those factors?
- 22 A They are the permitting agency for
- 23 Encina and South Bay. The Energy Commission is
- 24 not.
- 25 Q The Energy Commission is the permitting

1 authority for Otay Mesa, correct?

- 2 A Correct.
- 3 Q And part and parcel of that permitting
- 4 process includes analysis of impacts on regional
- 5 air quality caused by Otay Mesa, isn't that
- 6 correct?
- 7 A That's correct.
- 8 Q And is it your position that the result
- 9 of Otay Mesa's possibly increasing the likelihood
- of natural gas curtailments and thereby negatively
- impacting air quality is not something that the
- staff should consider in its air quality analysis
- for Otay Mesa?
- 14 A I think you're incorrect. We did
- 15 consider in looking at the ambient levels. In
- 16 past years fuel oil has been used at all nine
- 17 units. Therefore, the precursor emissions of VOC
- 18 and SOx and particular matter are already part of
- 19 the background. Therefore we did consider them.
- Now, how much they will change I don't
- 21 know. And I haven't heard any good numbers on how
- 22 much they will change. Therefore, it's very
- difficult to do analysis.
- Q Well, isn't the change from historical
- 25 patterns, which by definition do not include the

1 operation of Otay Mesa, part and parcel of the air

- 2 analysis that should have been undertaken?
- 3 A I don't believe so.
- Q And why is that?
- 5 A If you were to try to model the change I
- 6 think you would find that the stack parameters --
- 7 excuse me, the impacts from the stacks at Encina
- 8 or South Bay would not overlap with Otay,
- 9 therefore it would be very difficult in modeling
- 10 to show how the change would occur.
- But on a regional level, which
- 12 particulate matter is a regional pollutant,
- 13 secondary pollutants form, there might be some
- 14 impact.
- 15 But again, I think it would be very
- 16 difficult to come to a specific number as to how
- 17 the ambient levels of PM10 would have changed with
- the use of fuel oil, and whether or not they're
- 19 not already considered.
- 20 Q In terms though of modeling was there
- 21 any consideration given to modeling that would
- 22 provide for a range of potential impact of
- 23 increased fuel oil burning caused by the operation
- of Otay Mesa and its use of natural gas
- 25 exclusively, as opposed to a specific number which

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1 I certainly understand could be difficult to --
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- 2 A We did not model.
- 0 0 0kay.
- 4 A You said if you model. I said I did not
- 5 model.
- 6 Q Right, but have you ever engaged in
- 7 modeling that did provide you with a range of
- 8 potential impacts?
- 9 MR. CARROLL: Ever? In the context of
- 10 this project? Or --
- MR. GOLDMAN: No.
- 12 BY MR. GOLDMAN:
- 13 Q In the context of your position on the
- 14 staff, in terms of air quality analysis. What I'm
- 15 getting at is I understand that it might be
- difficult to get to a precise number, but it's my
- 17 understanding that a precise number is not called
- for in terms of air emissions and air quality
- 19 analysis, but rather possibly just a range of data
- in order to do further analysis and make
- 21 projection.
- So, my question was are you saying that
- it would not be do-able to undertake modeling that
- 24 would provide you with a range of impacts caused
- 25 by increased oil burning caused by the operation

- 1 of Otay Mesa?
- 2 A I believe you could undertake the
- 3 modeling. However, I think you would find that
- 4 the impacts from the fuel oil would be different
- 5 than the impacts from Otay Mesa.
- 6 Q How do you make that distinction?
- 7 A If you were to model Otay Mesa, which we
- 8 did, and determine the maximum impacts, and then a
- 9 range of impacts from those maximums, you could
- 10 then model South Bay or Encina and from those
- 11 stack you could also get maximum impacts, and then
- 12 a range of impacts at different locations.
- 13 What I think you would see is that you
- 14 would not see the impacts from Encina and South
- Bay contributing to any impacts at Otay impacts.
- 16 The stacks are so far apart it would be hard to
- 17 provide a nexus from modeling data.
- 18 Now, on a regional level, again there
- 19 may be some contribution of South Bay and Encina
- to the greater PM10, the ambient levels of PM10.
- 21 But we don't have a model that looks at that.
- 22 Q If I understand you correctly, though, a
- 23 separate model to analyze the impacts from
- 24 increased emissions from Encina and South Bay
- 25 caused by the curtailment of natural gas, caused

1 by the operation of Otay Mesa, could be done. It

- 2 would just be a separate model from the air
- 3 emissions modeling analysis from the Otay Mesa
- 4 stacks, correct?
- 5 HEARING OFFICER GEFTER: Excuse me. Mr.
- 6 Goldman, it sounds to me that built into your
- 7 question you're making a lot of assumptions. And
- 8 it would be best if you broke it down. Because
- 9 you're making the assumption that Otay Mesa was
- 10 causing the other two projects to burn fuel oil,
- and that's not a finding that anyone has made at
- 12 this point.
- So, break down your question.
- MR. GOLDMAN: The point is well taken in
- that there is an assumption and I think there is
- 16 evidence to suggest that the operation of Otay
- 17 Mesa, without a corresponding increase in natural
- gas supply, would have a likely effect of
- increasing the curtailment of natural gas supplies
- to existing plants.
- 21 And having said that, my understanding
- 22 is that Mr. Layton is indicating that it would be
- 23 too complex to have one model that would
- 24 incorporate both analysis of the emissions from
- 25 the Otay Mesa stack --

1	MR	LAYTON:	That's	not	what	Т	said

- 2 MR. GOLDMAN: Okay, then I apologize for
- 3 the confusion. Could you let me know what you did
- 4 say?
- 5 MR. LAYTON: In using the traditional
- 6 ISC model or the AIROMOD models, which look at a
- 7 point source, I would think you would not find
- 8 that there's the overlap between the impacts from
- 9 those two point sources.
- 10 But, again, on a regional level you
- might imagine that increases of PM10 and PM10
- 12 precursors could affect the background. It may be
- a very small effect, but again, we've already
- looked at that in the sense that we've looked at
- the ambient levels for PM10 over the last -- on
- 16 the same page, we refer to page 17, I go back five
- 17 years. And the PM10 numbers do jump around, but
- in those five years there's been fuel oil use at
- 19 those sites.
- 20 BY MR. GOLDMAN:
- 21 Q Is it your understanding that the
- 22 historical data in terms of natural gas
- 23 curtailment and fuel oil burning is adequate to
- 24 model for future planning purposes?
- 25 The reason I ask is my understanding is

1 until last week there'd only been, you know, a

- 2 couple of hours of curtailment over the last
- 3 several years.
- 4 A That's not my area of expertise. Your
- 5 question was about adequacy of curtailment and
- 6 things like that. I don't -- that's not my area
- 7 of expertise. I think Mr. Wood can answer that
- 8 question.
- 9 Q Well, let me try to make it more clear.
- 10 I'm asking about the air emissions consequences of
- 11 natural gas curtailment which leads to increased
- fuel oil burning which I know is addressed in the
- 13 air quality section.
- 14 MR. CARROLL: I'm going to object to
- 15 this line of questioning and echo comments made by
- Ms. Gefter a moment ago. All of these questions
- are assuming facts that are not in evidence, and
- therefore are lacking in foundation.
- 19 Every single question that has been
- asked is premised on a set of assumptions about
- 21 Otay Mesa Generating causing additional fuel
- burns.
- MR. GOLDMAN: Well, yes, but there has
- 24 been evidence adduced into the record on that. I
- 25 know that that's disputed by the applicant, but it

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1 is there.
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- 2 Let me move on in the hopes of making it
- 3 more clear. I'll focus more clearly on the air
- 4 quality section of the FSA to try to expedite
- 5 this.
- 6 BY MR. GOLDMAN:
- 7 Q If you'd turn to page 18, under the
- 8 section future air quality. And I gather, Mr.
- 9 Layton, by the title of the section this is
- 10 looking prospectively, correct?
- 11 A Correct.
- 12 Q And presumably the prospective analysis
- is based on analysis of historical patterns and
- 14 also projected alterations that would be caused by
- the operation of Otay Mesa, correct?
- 16 A Correct.
- 17 Q In the second paragraph of the future
- 18 air quality discussion, second sentence says:
- 19 While staff expects these trends to continue, and
- 20 it's progress in reducing ozone and PM10
- violations, staff is concerned about the
- 22 unforeseen air emissions implications in the power
- generation sector due to potential natural gas
- 24 curtailments and new plants.
- 25 And then there is a reference to such

1 curtailments could require the use of residual

- 2 fuel oil, et cetera.
- What do you mean, or did the staff mean
- 4 by unforeseen air emissions implications?
- 5 A What I was trying to do was lay out that
- 6 there are concerns about PM10 in the region, and
- 7 therefore Otay Mesa's contribution to those PM10
- 8 levels in the region were of concern to us and
- 9 significant.
- 10 What we have done in response to that is
- 11 mitigate to the extent feasible the emission of
- 12 Otay Mesa.
- 13 Q Just above the future air quality
- section straddling pages 17 and 18 there's a
- 15 reference to the switch from gas to oil at Encina
- or South Bay. And the statement is the switch
- 17 would be temporary to ease immediate shortages in
- 18 either electricity or natural gas in the region.
- 19 The increased sulfur emissions would not cause the
- 20 region to exceed the SO2 standards, but would
- 21 contribute to PM10 levels in the region.
- 22 Do I understand correctly that that
- 23 indicates that the increased duration and
- 24 frequency of oil burning at Encina or South Bay
- could, in fact, contribute to PM10 levels,

- increased PM10 levels in the region?
- 2 A That's what I've testified to before,
- yes.
- 4 Q Okay. And has that factor, that is the
- 5 impact of Otay Mesa's operation on South Bay and
- 6 Encina, in terms of increasing PM10 levels,
- 7 something that has been analyzed quantitatively?
- 8 A No. As I said before, what I was trying
- 9 to do was suggest that there is a need to look at
- 10 PM10 emissions from Otay Mesa because the area is
- 11 nonattainment for PM10 and possibly will continue
- to be a nonattainment for PM10.
- The reasons it will continue to be a
- 14 nonattainment for PM10 is because it continues to
- grow, more industries come in, more people come
- in, the vehicle miles continue to rise.
- Now, the District has done a good job
- 18 because they have kept the PM10 inventory
- 19 relatively constant despite those pressures.
- 20 What I was trying to suggest here is
- 21 that there are additional pressures that the
- 22 District should consider, and that we should
- 23 consider when looking at the ambient levels of
- 24 PM10.
- 25 And this is just one of them. But, I

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did not suggest that you could necessarily tie
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- 2 these emissions from Encina and South Bay to the
- 3 emissions at Otay. I have not said that.
- 4 Q Do you dispute that there is a direct
- 5 cause and effect relationship between Otay Mesa's
- 6 operation and if that operation, as has been
- 7 suggested by at least some witnesses here,
- 8 increases the likelihood of natural gas
- 9 curtailment and therefore the increased frequency
- of fuel oil burning, that that would, in fact,
- 11 contribute to the PM10 levels in the region
- independent of whether or not you happen to tie
- that directly to air emissions out of the Otay
- 14 Mesa stacks?
- MR. OGATA: I'm going to object to that
- 16 question. I'll let him respond to the extent that
- 17 he knows the answer to that, but I believe that
- 18 that's -- again, you're making a lot of
- 19 assumptions about things that I think are beyond
- 20 his expertise.
- 21 So, as I say, I'll let him answer to the
- 22 extent that he knows, but I want it clear that
- 23 you're asking something that I think he's not
- 24 really capable of answering.
- 25 MR. GOLDMAN: Well, for the record, he's

1 the designated air quality staff member, and this

- 2 is an air quality question.
- 3 MR. LAYTON: Actually your question
- 4 started out whether or not I thought curtailments
- 5 would increase.
- 6 MR. GOLDMAN: No, no, --
- 7 MR. LAYTON: Well, that's what I heard
- 8 out of your question.
- 9 MR. GOLDMAN: Well, let me make it very
- 10 clear, no, no, --
- 11 MR. LAYTON: Then you started getting to
- 12 PM10, so if you can just repeat the PM10 portion
- of the question I'll try to answer that.
- MR. GOLDMAN: I'll emphasize PM10
- 15 because I don't want to have any unnecessary
- 16 confusion on the record.
- 17 BY MR. GOLDMAN:
- 18 Q If I understand page 17 and 18
- 19 correctly, it seems to be an acknowledgement,
- 20 however indirect, that the operation of Otay Mesa,
- 21 in addition to direct impacts from its own stacks,
- 22 by having an impact on Encina and South Bay, such
- as they burn fuel oil in increased quantities,
- that that would also contribute to PM10 levels in
- the region, isn't that correct?

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1 A I think what you're trying to suggest is
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- 2 that I have, in my testimony, suggested that the
- 3 operation of Otay will cause that increased fuel
- 4 use. And I have never suggested that.
- What I've suggested in my testimony is
- 6 that I believe, given the testimony of others,
- 7 that there is a potential for curtailments of
- 8 natural gas in the region, and the use of fuel oil
- 9 in Encina and South Bay. That may contribute to
- 10 ambient levels of PM10.
- I have never suggested that Otay Mesa is
- 12 the cause of those curtailments.
- 13 Q Well, excepting, as you just pointed
- out, the assumptions of others for purposes of air
- 15 quality analysis. Assuming that Otay Mesa were,
- in fact, the cause of increased fuel oil burning
- 17 at Encina and Otay Mesa (sic) that would, in
- 18 effect cause an increase in PM10 levels in the
- 19 region, in addition to whatever PM10 emissions
- occur out of the Otay Mesa stacks, correct?
- 21 MR. OGATA: Excuse me, Mr. Goldman. I'm
- going to object just with respect to timing here.
- 23 You're asking him a question that basically leaves
- 24 open-ended the amount of time that that
- 25 curtailment may have a impact.

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1 If it's curtailment with respect to a
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- few seconds, respect to hours, or respect to days,
- 3 I think his answer would change.
- 4 So, again, I'll let him answer with
- 5 respect to just a kind of a qualitative response
- 6 which is what his testimony is about. But I can't
- 7 let him answer it with respect to any specifics
- 8 because I think that's, again, outside the scope
- 9 of his testimony, outside the scope of any
- 10 evidence that's in the record, and it's not part
- of the question.
- MR. GOLDMAN: Well, I agree --
- 13 PRESIDING MEMBER LAURIE: Let me ask --
- 14 Mr. Goldman, let me ask what your intentions are
- 15 regarding further questioning. Mr. Layton's
- 16 testimony has some general statements regarding
- 17 the fact that there could be additional
- 18 curtailment, and that's made referenced in the
- 19 future air quality section of page 18.
- 20 Page 19 talks about a potential worst
- 21 case scenario of such curtailments on PM10
- emissions.
- I thought I heard Mr. Layton testify
- that beyond that there has not been more explicit
- analysis.

1	Now what more are you seeking to pursue?
2	MR. GOLDMAN: What I'm seeking to
3	confirm is what I think is an implicit, but not
4	explicit, recognition of the cause and effect
5	relationship between increased air emission on a
6	regional basis caused by the operation of Otay
7	Mesa.
8	I recognize that there hasn't been, as
9	the witness has testified, any quantitative
10	analysis or modeling done on that.
11	But what I'd like to establish for the
12	record is that there's a recognition that the
13	regional issue exists. And then I'd like to

record is that there's a recognition that the regional issue exists. And then I'd like to follow up with some questioning about the MERC issue, which seems to recognize that you can mitigate a point specific problem, or impact, with a regional mitigation measure.

The flip side to that, we think, has to be that in doing and environmental analysis as required by CEQA, to the extent that there are direction regional consequences caused by a point specific event like the operation of a power plant, that that has to be recognized.

And I gather from Mr. Layton that he.

24 And I gather from Mr. Layton that he, 25 for whatever reason, is not necessarily

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1 comfortable recognizing or acknowledging that
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- 2 there is a regional impact in terms of air
- 3 emissions caused by the operation of Otay Mesa.
- 4 PRESIDING MEMBER LAURIE: Okay, but that
- 5 question has been asked and answered, I believe,
- 6 two or three times.
- 7 MR. GOLDMAN: Well, --
- 8 PRESIDING MEMBER LAURIE: But if you
- 9 want to ask it one more time in some different
- 10 fashion, do so, and maybe you'll get a different
- answer.
- 12 MR. GOLDMAN: I'll try one last time and
- then I will move on.
- 14 PRESIDING MEMBER LAURIE: Okay.
- 15 BY MR. GOLDMAN:
- 16 Q Mr. Layton, do you agree that increased
- 17 fuel burning at Encina and/or South Bay that would
- increase emissions of some of the substances that
- 19 are listed here at the beginning of your analysis,
- 20 as criteria air pollutants, would have a regional
- 21 impact on air quality?
- 22 A No, I wouldn't agree with that.
- Q Okay. Why is that?
- 24 A Depends on the amount; depends on the
- 25 duration of those emissions; depends on the

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1 seasonality of those emissions.
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- 2 On a certain day, yes, you are going
- 3 at -- you are correct, fuel oil has higher
- 4 emissions of PM10 and other PM10 precursors.
- 5 However, that may not have negative air quality
- 6 effect. It depends on the season, duration
- 7 and --
- 8 Q Frequency?
- 9 A -- frequency. Thank you.
- 10 Q Okay, yeah. So, clearly the more
- 11 frequent, the longer the duration, and it's both
- 12 winter and summer, meaning more in terms of these
- variables, obviously there'd be a greater
- 14 likelihood of a significant environmental impact,
- 15 correct?
- 16 A You really don't know that. It depends.
- 17 The --
- 18 Q Well, if I may, --
- 19 A -- you know, you could have a scenario
- where the fuel oil burns only occur on days where
- 21 there's not a PM10 problem, and therefore there's
- 22 no appreciable difference.
- 23 Q From what you know of the curtailment
- 24 and increased fuel burning of last week, do you
- 25 have any understanding as to whether or not that

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1 might be able to constitute a significant air
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- 2 impact?
- 3 MR. CARROLL: I'm going to object to
- 4 this question. As far as we know Mr. Layton
- 5 doesn't know anything about --
- 6 MR. GOLDMAN: Well, he can answer --
- 7 MR. CARROLL: -- until that occurred
- 8 last week, so there's no foundation for the
- 9 question.
- 10 MR. GOLDMAN: I asked him, do you know.
- 11 MR. LAYTON: I think Mr. Carroll's
- 12 correct, --
- 13 BY MR. GOLDMAN:
- 14 Q Is the answer no, you do not know?
- 15 A No, I do not know --
- 16 Q Okay.
- 17 A -- anything about the fuel oil burn last
- 18 week other than it did occur. I do not know the
- 19 timing or the duration.
- Q Okay.
- 21 A Or the quantity of fuel oil, the type of
- fuel oil, the emission parameters during the burn,
- 23 the loading on the boiler during that burn. These
- are all questions that one would want to look at
- 25 if one was trying to analyze the effects of the

- 1 Encina or South Bay stacks.
- 2 But again, I don't think there would be
- 3 any overlap with the Otay Mesa stack.
- 4 Q So I gather from what you just said that
- one could analyze it if one wanted to, correct?
- 6 A Correct.
- Q Okay, but you decided not to do that?
- 8 A Correct.
- 9 Q All right. And if I understand you
- 10 correctly, you're willing not to do that,
- 11 notwithstanding the fact that, as you point out
- 12 here, quote: While likely to be short in
- duration, residual fuel oil firing can
- 14 significantly increase the emission rates of some
- criteria air pollutants, isn't that correct?
- 16 A Correct.
- 17 Q Let's move on to the next section, and I
- think these other ones will go more quickly.
- 19 The next section, as you know, on page
- 20 18 is entitled, air emissions implications of rule
- 21 69 and potential natural gas curtailments in San
- 22 Diego.
- 23 Could you tell us generally why this
- 24 section is here?
- 25 A As I've said repeatedly, this was trying

1 to lay out the PM10 levels in the area, the

- 2 ambient PM10 for the region.
- 3 San Diego has made progress because
- 4 they've managed to keep their PM10 inventories
- 5 fairly constant despite the pressures of increased
- 6 vehicle growth and population growth.
- 7 They also have maintained fairly level
- 8 number of impacts per year, or violations, excuse
- 9 me, of the state standard.
- 10 This was just going to the fact that
- 11 there is potential for changes in one particular
- source. There are numerous other sources in the
- 13 basin which could also change, which the district
- 14 would want to look at in trying to come up with a
- method or a plan to attain the state PM10
- 16 standard.
- 17 Q There are references in this section, as
- 18 well, to NOx and sulfur emissions.
- 19 A Correct.
- 20 Q And the reason I raise this is because
- in your discussion previously you just refer to
- 22 PM10. Is it the staff's position that NOx and
- 23 sulfur emissions are not something that needs to
- 24 be analyzed?
- 25 A In referring to the regional levels of

- 1 PM10, one should always look at any precursors.
- NOx, VOCs and SOx are all precursors to PM10.
- 3 Q At the beginning of this discussion of
- 4 the air emissions implications of rule 69 and
- 5 potential natural gas curtailments in San Diego
- 6 there's a reference to the San Diego region, from
- 7 an electricity and natural gas perspective, can be
- 8 considered an island with a limited number of
- 9 connections to the greater western state supply
- 10 networks.
- Why is that the introductory commentary
- 12 to this discussion?
- 13 A From what I understand from testimony of
- others, the region can experience shortages of
- 15 electricity or natural gas, either due to high
- 16 demand, low supply or interruptions of supply in
- 17 the supply lines.
- 18 Q And this sentence in this section in the
- 19 air quality analysis of the FSA acknowledges, does
- it not, that Otay Mesa may have an exacerbating
- 21 impact on this preexisting condition, correct?
- 22 A No, that's not what I said.
- Q Well, I know that's not what it says,
- 24 but doesn't that acknowledge and reflect that is a
- 25 potential?

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1 A Again, from what I understand, the issue
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- of electricity supply and natural gas supply are
- 3 separate issues. The limited number of pipelines
- 4 and transmission lines, and the limited amount of
- 5 in-basin generation, and the amount of imports,
- 6 these are all existing things.
- 7 And I make no conclusions about whether
- 8 Otay will exacerbate that situation or not.
- 9 That's out of my area of expertise.
- 10 Q But the impact of Otay Mesa and
- 11 potential natural gas curtailments and air
- emissions implications are part of that, correct?
- 13 MR. CARROLL: I'm going to object to Mr.
- Goldman's repeated attempts to read into Mr.
- 15 Layton's testimony what he wants it to say.
- The witness has testified as to what the
- 17 statement says. We can all read what the
- 18 statement says. If Mr. Goldman wants to read
- 19 something else into that, I suggest that's more
- 20 appropriate for the brief than it is for
- 21 examination of the witness.
- 22 HEARING OFFICER GEFTER: Mr. Carroll's
- objection is sustained.
- MR. GOLDMAN: Well, for the record, I'm
- in no position to get Mr. Layton to say anything

1 that he doesn't want to say. The whole purpose of

- 2 my questioning is basically for me to have, and
- 3 the record to reflect ostensibly what the
- 4 underlying assumptions, either explicit or
- 5 implicit, are in the analysis. And Mr. Layton is
- 6 perfectly capable of taking care of himself in
- 7 this regard.
- 8 But I will ask some additional
- 9 questions.
- 10 BY MR. GOLDMAN:
- 11 Q Given the title of this subsection, Mr.
- 12 Layton, there is no dispute, is there, that there
- are air emissions implications of potential
- 14 natural gas curtailments in San Diego, correct?
- 15 A Correct, that's what the title says.
- 16 Q Okay. And this title is in the context
- of the perspective operation of Otay Mesa,
- 18 correct?
- 19 A No.
- Q It is not?
- 21 A This section, again, deals with future
- 22 air quality. I was trying to lay the groundwork
- of despite the efforts of the District to reach
- 24 attainment of the state PM10 standard, they have
- 25 not.

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1 But they have managed, over time, to
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- 2 keep PM10 levels relatively constant, and keep the
- 3 number of violations relatively low.
- 4 However, they have not reached
- 5 attainment yet. And therefore they need to
- 6 continue to look at various sources of PM10
- 7 emissions and their precursors.
- 8 That's the only intent of this section
- 9 right here.
- 10 Q Well, rather than move to strike your
- answer as nonresponsive, let me ask a follow-up
- 12 question.
- 13 The discussion here is contained in the
- 14 FSA regarding the Otay Mesa application for
- 15 certification, correct?
- 16 A Correct.
- 17 Q Okay, --
- 18 HEARING OFFICER GEFTER: Mr. Goldman,
- 19 let's move on. Mr. Layton has already answered
- 20 your question, and it seems to me that you're
- 21 trying to get him to change his answer by asking
- 22 him some other questions.
- 23 He gave you the explanation as to why
- this section is in here. Unless you have a much
- 25 more specific question, let's move on to another

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1 topic.
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- MR. GOLDMAN: Okay.
- 3 BY MR. GOLDMAN:
- 4 Q On the next page, second to last
- 5 paragraph of this section, air emissions
- 6 implications and potential natural gas
- 7 curtailments in San Diego, there's a reference to,
- 8 quote, "the huge increases in NOx, sulfur and PM10
- 9 during residual fuel oil fired relative to natural
- 10 gas firing may have adverse effects on the air
- 11 quality in the region."
- 12 Do you see that?
- 13 A Yes, I do.
- 14 Q There is also at the end of the next
- paragraph a discussion about basically a statement
- 16 that the exact emissions increases depend on
- 17 several factors that you've already alluded to,
- and there's a reference at the very end that
- 19 increases in PM10 during humid conditions can
- 20 increase ambient PM10 levels. Do you see that?
- 21 A Yes.
- 22 Q Is that referring to winter time, time
- for winter curtailment?
- 24 A Generally PM10 does follow a seasonal
- 25 pattern, but in San Diego that pattern's not as

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1 necessarily as clear.
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- 2 Q Well, is it your understanding that San
- 3 Diego is more humid in the wintertime or the
- 4 summertime?
- 5 A To be honest I don't really know the
- 6 exact weather of San Diego. I lived here for
- 7 seven years but I can say that it's very pleasant
- 8 in the winter sometimes, also very rainy in the
- 9 winter sometimes.
- 10 Q Okay. Is it sometimes very rainy in the
- 11 summertime?
- 12 A Occasionally you do get some rains, yes.
- Q Okay.
- 14 A But again, I'm not a weatherman, so I
- would defer to research on that before I state
- 16 exactly what the weather is down here at all
- 17 times.
- MR. GOLDMAN: Well, maybe I'll ask Mr.
- 19 Weatherwax, --
- 20 (Laughter.)
- 21 MR. GOLDMAN: -- as the name implies, if
- he knows.
- 23 HEARING OFFICER GEFTER: How many more
- questions do you have, Mr. Goldman?
- 25 MR. GOLDMAN: We're actually nearing the

end. In fact, we're going to make progress by

- 2 going up to around page 35. Before I get ahead of
- 3 myself, page 34, emissions offsets.
- 4 BY MR. GOLDMAN:
- 5 Q If I understand correctly, Mr. Layton,
- 6 among the emissions offsets, among several
- 7 creative and innovative devices, include MERCs
- 8 affecting the San Diego Harbor, is that correct?
- 9 A That's correct.
- 10 Q Do you know, by chance, how many miles
- 11 the harbor is from the Otay Mesa facility?
- 12 A I believe I have it, it's about 15, 16
- 13 miles I believe.
- 14 Q Okay. And there's a nice discussion of
- the offset, and specifically on page 38 regarding
- the staff's PM10 mitigation measures there's a
- 17 statement that, quote, "staff investigated
- 18 additional emissions reductions in the San Diego
- 19 region."
- 20 What is the relevant geographic unit for
- 21 emissions reductions in connection with the Otay
- 22 Mesa project?
- 23 A I'm not sure I understand your question.
- Q Well, I've seen in here, there's a
- 25 reference to the San Diego region, to the San

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1 Diego Air Pollution Control District, to the San
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- 2 Diego Basin, those may be the same geographic
- 3 areas of jurisdiction, I don't know.
- 4 And so I was a little confused in terms
- of the geographic range of the mitigation activity
- 6 that the staff would consider acceptable in terms
- 7 of offsetting the specific, facility specific
- 8 impact of Otay Mesa.
- 9 A Well, the staff was looking to offset
- 10 PM10 impacts.
- 11 Q Okay.
- 12 Q And PM10 is a regional pollutant.
- 13 Therefore we do feel there is a nexus between the
- 14 region, say some sources are far away, some
- 15 sources are closer.
- 16 Q Okay, in this context how do you define
- 17 a region?
- 18 A San Diego air basin.
- 19 Q Okay. And is that consistent with the
- 20 jurisdiction of the San Diego Air Pollution
- 21 Control District?
- 22 A The District, the County and the air
- 23 basin --
- 24 Q Okay, --
- 25 A -- are -- actually I don't know about

the air basin being one wholly in the District.

- Q Was there any concern as to whether or not the geographic span from the San Diego Harbor
- 4 being 15 or 16 miles from the Otay Mesa plant
- 5 would render an offset basically irrelevant
- 6 because it was too attenuated geographically?
- 7 A Offsets are looked at on a program
- 8 basis. If you -- oftentimes offsets are not
- 9 necessarily directly tied to the project's
- 10 emissions. But over time, through the continuing
- implementation of the new source review emission
- 12 reductions occur throughout the basin.
- Now, for ozone, which the MERCs were
- going after NOx, which is a precursor to ozone, it
- does form downwind and over time. And therefore
- if you look at some of the ambient air quality
- data that I show in here about ozone, you will
- 18 notice that the ozone is generally higher inland
- 19 than at the coast, because the ozone takes time to
- develop.
- 21 Therefore, these NOx offsets upwind of
- Otay will provide some benefit.
- Q Well, in terms, though, what I'm really
- trying to get at, the analytical framework for
- 25 recognizing that an offset at a place that's

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1 geographically removed from the actual facility
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- 2 would be considered a legitimate environmental
- 3 offset for CEQA purposes.
- 4 MR. CARROLL: I'm sorry, I thought you
- 5 were finished.
- 6 MR. GOLDMAN: I am.
- 7 MR. CARROLL: I'm going to object to
- 8 this line of questioning. I think the question of
- 9 what is or is not a legitimate offset is a matter
- 10 of what is required by the District rules. I'm
- going to suggest that these questions are more
- 12 appropriately addressed to the District Staff.
- 13 HEARING OFFICER GEFTER: Mr. Carroll's
- objection is sustained, and I would agree with his
- 15 comment.
- 16 MR. GOLDMAN: And so would I because I
- 17 think the whole respect he misunderstood my
- 18 questioning, or more likely my question wasn't as
- 19 clear as it should have been.
- 20 I'm not taking issue with the offset
- 21 program. What I'm trying to understand is the
- 22 range of the staff's willingness to implement
- this, what seemingly is a very innovative and
- 24 creative program, in terms of their comfort level
- of geographic relationship with the facility

- 1 location.
- 2 The reason that I'm curious about this
- 3 is because if I understand Mr. Layton correctly he
- 4 has stated that the staff did not do a CEQA air
- 5 emissions analysis of the emissions of Encina and
- 6 South Bay because they're, you know, further away
- 7 from the Otay Mesa facility.
- 8 So I just wanted to be able to see if we
- 9 could get some greater understanding as to the
- 10 range of the staff's concerns in terms of
- 11 geographic proximity as it relates to air
- 12 emissions and air offsets.
- 13 HEARING OFFICER GEFTER: Mr. Goldman, it
- appears to me that you're confusing several
- 15 mitigation measures, because the offset program is
- 16 a program that's been adopted by the District, as
- 17 we understand it, with input from CARB and USEPA.
- 18 And this program has been approved.
- 19 So it would seem that your questions
- 20 with respect to the MERC offset program would be
- 21 more appropriate for the Air District.
- 22 With respect to whether staff conducted
- 23 a CEQA analysis of potential fuel burning of the
- 24 Encina and South Bay plants is a different
- 25 question. Perhaps you can ask that question.

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1 MR. GOLDMAN: Okay.
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- 2 BY MR. GOLDMAN:
- 3 Q Mr. Layton, do I understand you
- 4 correctly that the staff did not perform a CEQA
- 5 analysis of increased air emissions from the
- 6 Encina and South Bay plants because those
- 7 emissions occur at locations that are considered
- 8 too distant from the Otay Mesa facility?
- 9 A No. In my judgment you could not show a
- 10 contribution from those stacks to any impacts that
- 11 are occurring from Otay Mesa.
- Now, with offsets we're looking to
- reduce the emissions. What you're talking about
- 14 are impacts from the stacks.
- 15 And as I said before, I did not analyze
- 16 the impacts from Encina and South Bay. Yes, they
- 17 are remote. Yes, they are about the same location
- 18 as the harbor which the NOx offset reductions come
- 19 from.
- 20 But, again, those offset reductions are
- 21 providing emission reductions to the inventory.
- 22 And I did not do an impact analysis on the stack,
- 23 the South Bay and Encina stacks.
- Q If I understand you correctly you're
- 25 saying that the -- well, do I understand you

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1 correctly when I understand that you're
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- 2 distinguishing the impacts of the increased air
- 3 emissions from Encina and South Bay as to
- 4 distinguish from the impacts of the emissions of
- 5 Otay Mesa?
- 6 MR. CARROLL: I'm going to object.
- 7 There is no foundation for the question. It
- 8 assumes that there are increased impacts
- 9 associated with additional fuel burning from
- 10 Encina and South Bay caused by Otay Mesa.
- Once again we're back to a series of
- 12 questions that are premised on a set of
- assumptions that are not in the record.
- MR. GOLDMAN: Well, the record actually,
- 15 I think, does reflect that. Not only the
- 16 testimony of Mr. Weatherwax, but I think the
- 17 discussion that we've just exhaustively
- 18 encountered right here in Mr. Layton's analysis,
- 19 the air emissions impacts of natural gas
- 20 curtailment.
- 21 So the foundation is there. I just
- 22 wanted to clarify what Mr. Layton just said --
- 23 MR. LAYTON: I think it's air emission
- 24 implications, not impacts.
- MR. GOLDMAN: Okay.

1 BY MR. GOLDMAN:

- 2 Q What is the distinction between that?
- 3 A The emissions will change with fuel oil
- 4 firing.
- 5 Q Okay.
- 6 A The air quality impacts I did not
- 7 quantify. I think it would be very difficult to
- 8 quantify.
- 9 Q Well, that I understand. But, in
- 10 addition, I guess I'm confused about the
- 11 distinction between contributions to air quality,
- that's just a word I wrote down from what you had
- 13 just said, so forgive me, you might have to put it
- in perspective for me, and actual impacts from
- 15 Otay Mesa.
- I probably misunderstood you, but my
- 17 understanding was that you have done an analysis
- and a modeling of the air emissions and the
- impacts of the emissions from the Otay Mesa stack,
- 20 correct?
- 21 A The applicant did the analysis, yes.
- Q Yes, and you reviewed it?
- 23 A Yes.
- 24 Q And you recognized that there could be
- 25 air quality implications from increased fuel oil

1 burning, but that that would derive from emissions

- 2 from the Encina and South Bay stacks, as opposed
- 3 to the Otay Mesa stacks, correct?
- 4 A Correct. I've never said that Otay Mesa
- 5 causes that increase. I'm not qualified to
- 6 suggest that Otay Mesa is going to cause increased
- 7 curtailments or increased use of fuel oil. I've
- 8 never said that, I can't.
- 9 Q Okay.
- 10 HEARING OFFICER GEFTER: Mr. Goldman,
- 11 this is about the sixth or seventh time that the
- 12 witness has stated that.
- 13 If you have a question could you ask the
- 14 question directly without putting all of your
- understandings and implications into the question.
- And how many more questions do you have?
- 17 MR. GOLDMAN: I think I have either none
- or just one or two follow-ups.
- 19 BY MR. GOLDMAN:
- Q Mr. Layton, if we could turn to page 42,
- 21 the conclusions and recommendations. There's a
- 22 reference that the Otay Mesa plant would reduce
- 23 operational emissions and provide emissions
- offsets, reducing any potential NOx impacts to a
- 25 level of insignificance.

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1 I take it that that --
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- 2 MR. CARROLL: I'm sorry to interrupt,
- 3 where --
- 4 MR. GOLDMAN: Page 42, at the very
- 5 bottom.
- 6 MR. CARROLL: Okay, thank you.
- 7 BY MR. GOLDMAN:
- 8 Q I take it that that conclusion does not
- 9 incorporate any analysis of potential NOx impacts
- 10 at South Bay or Encina, correct?
- 11 MR. CARROLL: Object. Asked and
- 12 answered.
- MR. GOLDMAN: Well, --
- 14 HEARING OFFICER GEFTER: It's sustained.
- 15 Also, again, Mr. Goldman, you're putting your
- 16 understanding into the question. If you can ask a
- 17 direct question of the witness it would be more
- 18 helpful to us.
- MR. GOLDMAN: All right.
- 20 BY MR. GOLDMAN:
- 21 Q Is it the staff's intention to reduce
- 22 any potential NOx impacts of Otay Mesa to a level
- of insignificance?
- 24 A We believe the NOx offset package
- 25 reduces the NOx impacts to a level of

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1 insignificance.
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- 2 Q And is that your goal?
- 3 A Yes.
- 4 Q Is it also your goal to reduce any
- 5 potential of PM10 impacts to a level of
- 6 insignificance to the extent feasible?
- 7 MR. CARROLL: I'm going to object to the
- 8 relevancy of the staff's goals here. I don't
- 9 think that the staff's goals are what dictate what
- 10 happens and what does not happen.
- 11 PRESIDING MEMBER LAURIE: Mr. Carroll,
- give him this opportunity to wrap it up.
- MR. GOLDMAN: Thank you.
- 14 (Laughter.)
- MR. CARROLL: Trying to hasten that.
- MR. LAYTON: We would like to mitigate
- 17 the PM10 impacts from this project to the extent
- 18 feasible.
- 19 BY MR. GOLDMAN:
- 20 Q And that's on a regional basis, correct?
- 21 A We hope on a regional basis we can
- reduce the impacts of the PM10 and PM10
- precursors.
- 24 Q Final question. Did the staff consider
- 25 the impact on regional air quality of the

1 operation of Otay Mesa under reasonable worst case

- 2 scenario?
- 3 A For the project, yes.
- 4 MR. GOLDMAN: Thank you.
- 5 HEARING OFFICER GEFTER: Does Duke have
- 6 questions of the witness?
- 7 MS. LUCKHARDT: Just a couple.
- 8 (Laughter.)
- 9 MS. LUCKHARDT: And I do mean that.
- 10 CROSS-EXAMINATION
- 11 BY MS. LUCKHARDT:
- 12 Q Mr. Layton, I believe that you testified
- in response to Commissioner Laurie's questions
- 14 earlier that an increase in emissions from Otay
- 15 Mesa increase in PM10 emissions would -- let me
- 16 start this again.
- 17 He asked you for a justification,
- 18 Commissioner Laurie asked you for a justification
- 19 for your additional mitigation, and is it correct
- 20 to say that since the state standard was in
- 21 violation that any addition in PM10 would create a
- 22 significant impact?
- MR. CARROLL: I would object, that calls
- for a legal conclusion.
- 25 MS. LUCKHARDT: I believe he stated that

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1 it was a significant impact in his determination
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- in response to Commissioner Laurie, so I don't
- 3 think that this is beyond that question.
- 4 HEARING OFFICER GEFTER: Are you asking
- 5 him to repeat his testimony?
- MS. LUCKHARDT: Sure.
- 7 HEARING OFFICER GEFTER: Well, we have
- 8 it in the record. Why don't you move on. Restate
- 9 the question.
- 10 MS. LUCKHARDT: Okay, that's fine.
- 11 BY MS. LUCKHARDT:
- 12 Q I assume you recall your response?
- 13 A Yes.
- 14 Q Okay, great. And, Mr. Layton, you have
- 15 recommended in this case, as well as other cases,
- 16 mitigation based on construction emissions, have
- 17 you not?
- 18 A We've recommended that the construction
- emissions be mitigated, yes.
- 20 Q And would you consider similar levels of
- 21 increases in PM10 due to oil burning at South Bay
- 22 and Encina should that occur, a significant
- 23 impact?
- 24 A You'd have to take that up with the
- District. I said the emissions change, the

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1 emissions increase, but I'm not analyzing South
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- 2 Bay and Encina in this instance.
- 3 Q I understand you're not analyzing South
- 4 Bay and Encina. What I was asking you is whether
- 5 you would consider if you were analyzing that,
- 6 would you consider similar levels of increases,
- 7 similar to the levels of increases you find in
- 8 construction emissions, a significant impact, if
- 9 that were to be --
- 10 MR. CARROLL: Objection, calls for
- 11 speculation -- sorry.
- 12 BY MS. LUCKHARDT:
- 13 Q -- if that were to be found, would that
- 14 be a significant impact?
- MR. CARROLL: Object, it calls for
- 16 speculation. If he were to analyze it is the
- 17 beginning of the question. It's purely
- 18 speculative.
- 19 MS. LUCKHARDT: It's simply a
- 20 hypothesis. It's an example of something to see
- 21 what level would be considered a significant
- 22 impact.
- 23 HEARING OFFICER GEFTER: I don't
- 24 understand what the connection is between
- 25 construction -- emissions during construction and

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1 the emissions at South Bay and Encina.
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- MS. LUCKHARDT: Well, I'm trying --
- 3 HEARING OFFICER GEFTER: There's a very
- 4 limited nexus there, I don't understand it.
- 5 MS. LUCKHARDT: Well, what I'm trying to
- find out is at what level would he consider PM10
- 7 increases significant.
- 8 PRESIDING MEMBER LAURIE: I thought I
- 9 heard the testimony that it depends on a number of
- 10 factors. And Mr. Layton is unable to provide a
- generic response to the question.
- MS. LUCKHARDT: I understand that.
- 13 That's why I was using the construction emissions
- 14 as an example. That if they were like that, would
- 15 that be a significant impact. I was trying to use
- something that he had already done that he could
- 17 relate to as opposed to just some general
- 18 statement.
- 19 And since he has analyzed the
- 20 construction emissions that's why I was using that
- 21 as an example.
- 22 HEARING OFFICER GEFTER: He analyzed
- 23 them because those were construction emissions
- 24 that would occur during the construction of Otay
- 25 Mesa, which is --

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1 MS. LUCKHARDT: Absolutely.
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- 2 HEARING OFFICER GEFTER: -- the project
- 3 that he --
- 4 MS. LUCKHARDT: Absolutely.
- 5 HEARING OFFICER GEFTER: Ask another
- 6 question. The objection to this question is
- 7 sustained.
- 8 BY MS. LUCKHARDT:
- 9 Q Mr. Layton, in your professional opinion
- in analyzing power plant projects, what level of
- increase in PM10 emissions -- you can qualify it
- in any way you like -- is considered a significant
- 13 impact?
- 14 A That would depend on a lot of factors.
- 15 It depends on the -- I understand where your
- 16 question's going. It really depends on the
- 17 background.
- 18 And in looking at South Bay and Encina
- 19 you would have to look at how often fuel oil
- firing has been done in the past.
- 21 And so I would hate to say that -- I
- 22 cannot come up with a number. I can't answer your
- 23 question, say what is significant or not for South
- 24 Bay and Encina, because you would have to look at
- 25 the ambient levels. Currently they're permitted

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1 at 2000 -- well, between the two of them, 2000
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- 2 tons per year.
- 3 Come January 1 they're down to 850. You
- 4 might want to include that in any analysis of
- 5 impacts. There's a lot of things going on. It
- 6 would be a very -- you would want to do a complete
- 7 analysis. I would hate to sit here on the stand
- 8 and try to come to a conclusion I don't know the
- 9 answer to.
- 10 Q But even though that is occurring there,
- 11 you have found a regional PM10 impact due to Otay
- 12 Mesa, correct?
- 13 A Correct, it's a new source.
- 14 Q So would additional impacts to an
- 15 existing source not be considered significant?
- MR. CARROLL: I just want to object. It
- 17 calls again for a legal conclusion. Counsel is
- 18 asking this witness, I believe, to make a
- 19 statement as to whether or not something is or is
- 20 not a direct impact under CEQA.
- 21 MS. LUCKHARDT: I wasn't asking --
- 22 MR. CARROLL: Or an indirect impact.
- MS. LUCKHARDT: I wasn't asking that
- 24 question at all.
- MR. CARROLL: Well, that certainly is

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1 the import of the question.
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- 2 HEARING OFFICER GEFTER: Rephrase your
- 3 question.
- 4 PRESIDING MEMBER LAURIE: Before you do
- 5 that, just let me note that this witness is unable
- 6 to testify as to the increased amount of emissions
- 7 resulting from any additional oil burning from
- 8 South Bay and Encina. That's his testimony.
- 9 You're not going to get anything more out of him.
- 10 And I don't want any more questions on it.
- 11 Maybe some other witness has it. But,
- 12 you folks have tried to get at it for the last
- hour and there isn't anything there. So, I'm
- 14 going to ask you to move on.
- 15 (Laughter.)
- 16 PRESIDING MEMBER LAURIE: That's not
- just a potted plant sitting there, but he doesn't
- 18 know the answer to that question.
- 19 (Laughter.)
- 20 HEARING OFFICER GEFTER: Is that --
- MS. LUCKHARDT: Um-hum.
- 22 HEARING OFFICER GEFTER: Ms. Duncan, do
- you have questions of this witness?
- MS. DUNCAN: Yes. I'm not going to ask
- what we've been talking about.

1	(Laughter.)

- MS. DUNCAN: I have different questions.
- 3 My questions go again to the issues that have been
- 4 recently discovered in our scenario about how our
- 5 new market situation works. I guess that's the
- 6 best way I can describe it.
- 7 CROSS-EXAMINATION
- 8 BY MS. DUNCAN:
- 9 Q And I'm going to ask Matt to recall a
- 10 long time ago, a year ago, staff's report number
- 11 2. Do you remember that report at all, Matt?
- 12 A I do not.
- 13 MS. DUNCAN: I should have entered it as
- 14 an exhibit, I guess, --
- 15 HEARING OFFICER GEFTER: Just ask the
- 16 question.
- 17 BY MS. DUNCAN:
- 18 Q I will read quickly, under emission
- 19 levels during all operating modes. The essence of
- 20 it is with a merchant plant the issue that has
- 21 been introduced here is that maybe this plant will
- 22 run today and maybe it won't. It's going to
- 23 depend on the market conditions and whether or not
- there's an incentive for a market plant to run.
- So, the concerns in that status report

1 were exactly that. Concerns have been raised in

- 2 your FSA about the emission levels during startup,
- 3 shutdown and all of the other levels in between.
- 4 How do you feel that your FSA has
- 5 adequately addressed concerns about what all those
- different levels for emissions are in this new
- 7 deregulated market in terms of how this plant, a
- 8 merchant plant, whether it will or will not run?
- 9 I raised the issue earlier about how did
- 10 the emission level change in different modes,
- 11 different loads, and I think all of these are some
- 12 analysis that's missing in our air quality --
- 13 HEARING OFFICER GEFTER: What is your
- 14 question? You need to just get to the question.
- 15 BY MS. DUNCAN:
- 16 Q Has this been analyzed? Is it contained
- in your FSA? I didn't see any analysis done in
- 18 this area.
- 19 A The applicant, in their AFC and
- 20 subsequent submittals, did analyze various
- 21 emission rates. And then also various stack
- 22 parameters.
- 23 A turbine operating, as Mr. Fontana
- 24 testified earlier today, the emission rates can go
- down at lower loads, but the impacts can go up

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1 because the stack parameters change. The
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- 2 temperature and the velocity of the stack plume
- 3 change.
- We tried to look at the various
- 5 parameters this plant would experience. I think
- 6 they bounded the worst case by the 50 percent
- 7 load.
- 8 I don't see this project operating at
- 9 less than 50 percent. Number one, I think they
- 10 would end up violating their permit conditions,
- 11 which they would suffer significant financial
- 12 losses if they did that.
- 13 Q Well, my question is motivated from the
- 14 fact that we have now, in terms of alternatives
- analysis and in terms of the transmission
- 16 problems, we have a scenario where we're talking
- 17 about them working at 100 to 150 megawatts, which
- 18 I think is less than the 50 percent.
- 19 And there's supposed to be a study done?
- You asked staff to do a study by December 1st.
- 21 So, that's what's motivating my question. I mean
- that, I think, is something that we haven't
- 23 addressed. Am I right or wrong about that?
- 24 A Well, I think there are two units out
- 25 there, and if you had to go to very low loads, say

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1 150 megawatts for the entire facility, you would
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- 2 shut down one unit all together, and operate the
- 3 other one at less than full load.
- 4 You may end up dumping some steam.
- 5 There's various options to operating at less than
- 6 100 percent capacity. You can either curtail --
- 7 Q Is this in your analysis? That's what
- 8 I'm asking.
- 9 A No, but --
- 10 Q Okay, that's my question. So do we have
- 11 a possible situation --
- 12 A They looked at --
- 13 Q -- missing from our analysis?
- 14 A I believe not. I believe they analyzed
- the range of operational parameters that this
- 16 project could experience.
- 17 Q In terms of the offset package for this
- 18 project, what was the level of operation that
- 19 determined what the offsets for each of the
- 20 criteria pollutants are?
- 21 A The worst case emissions.
- 22 Q At what load?
- 23 A It depends. Some pollutants go up with
- lowering load, and some pollutants go down with
- lowering loads.

And so we came up with the worst case
emissions for the year based on the hours of
operation and the likely scenarios of operation
and came up with the worst case emissions.

O Okay, so is it safe to say that we're

- Q Okay, so is it safe to say that we're making some assumptions here on how much it's going to be running, --
- 8 A Yes.

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16

- 9 Q -- and that that's contained in your 10 analysis?
- 11 A I'd defer a lot to the AFC because I
 12 believe they did a very extensive analysis on how
 13 they might operate the unit. And also the FDOC
 14 looked at a range of emissions over the life of
 15 the project, or over an annual --
 - Q Would you disagree with me that's somewhat speculative?
- 18 A I would disagree with you it's somewhat
 19 speculative. I think the operation of this plant
 20 and the emissions from this plant are fairly well
 21 known.
- 22 These projects are being built
 23 throughout the world, throughout California. I
 24 believe that the operation of these units will
 25 come very very close to the way this thing is

- 1 permitted.
- 2 There may be some slight changes or
- 3 slight differences, but I don't think it will
- 4 affect the permits or the mitigation package for
- 5 this project.
- 6 Q So you believe that the status report
- 7 number two that identified potential problems,
- 8 that that's been addressed, a constant turning on
- 9 and off situation scenario?
- 10 A Yes. We analyzed -- we tried to analyze
- 11 the various emissions that occur during these
- 12 transient conditions. And I think we did analyze
- them, or the applicant did analyze them, yes.
- 14 Q You believe that they're not going to be
- 15 very transient, that they'll happen infrequently?
- 16 A No, I think the transient conditions
- 17 will occur, but I think they've been analyzed. If
- 18 you go back to one of the conditions in here talks
- about the worst case during commissioning for CO
- 20 and I think PM10. Actually I don't -- for CO I'm
- 21 sure, forget what the other pollutant is.
- 22 But they did analyze a worst case for
- 23 when this thing might be operating without air
- 24 pollution control equipment installed. And the
- 25 numbers are very high. That would be a good

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1 example of how they're trying to bound any
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- 2 transient conditions.
- I think they've done a very good job. I
- 4 think this project is well defined from its
- 5 emissions, and then well modeled for its impacts.
- 6 MS. DUNCAN: Those are the only
- 7 questions I have. Thank you.
- 8 HEARING OFFICER GEFTER: Mr. Claycomb.
- 9 MR. CLAYCOMB: Save Our Bay, Inc. has no
- 10 questions.
- 11 HEARING OFFICER GEFTER: Does staff have
- 12 any redirect at this point?
- MR. OGATA: Actually I had a couple of
- 14 questions but in light of Commissioner Laurie's
- 15 statement, I believe we don't need to go over them
- 16 again.
- 17 (Laughter.)
- 18 MR. OGATA: In fact, Mr. Layton does not
- 19 have the information with respect to frequency
- 20 duration and seasonality to make his analysis, so
- 21 I won't bother to --
- 22 PRESIDING MEMBER LAURIE: Well, don't do
- 23 that. If there's something relevant you need to
- ask, you go ahead and take your turn.
- 25 MR. OGATA: Thank you, Commissioner

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1 Laurie, but I think you just gave me an
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- 2 opportunity to say what I wanted to say without
- 3 asking Mr. Layton, so I'll defer. Thank you.
- 4 PRESIDING MEMBER LAURIE: Fine.
- 5 HEARING OFFICER GEFTER: Do you want to
- 6 move exhibit 88?
- 7 MR. CARROLL: Ms. Gefter, we just have
- 8 one follow-up question, if we may, of this
- 9 witness.
- 10 HEARING OFFICER GEFTER: Go ahead.
- MR. CARROLL: Thank you.
- 12 CROSS-EXAMINATION
- BY MR. CARROLL:
- 14 Q Mr. Layton, during the evidentiary
- 15 hearings yesterday counsel, Mr. Ogata, stated that
- staff did not, in the FSA, analyze the air quality
- implications of additional fuel oil burns at
- 18 Encina and South Bay because he believed that to
- do so would be speculative.
- 20 Do you agree with Mr. Ogata's statement?
- 21 A I didn't hear the conversation therefore
- I'm not sure of the context. But on its face, I
- would say, yes, I agree with Mr. Ogata.
- MR. CARROLL: Thank you, Mr. Layton.
- MR. OGATA: At this time we would move

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exhibit 88 into the record, and as stated before,
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- 2 we will move Mr. Layton's testimony in the final
- 3 staff assessment into the record when the other
- 4 piece of testimony from that exhibit have been
- 5 admitted.
- 6 HEARING OFFICER GEFTER: Any objections
- 7 to --
- 8 MS. LUCKHARDT: I have one more question
- 9 in light of --
- 10 HEARING OFFICER GEFTER: You can do some
- 11 recross. Let's just get exhibit 88 in.
- MS. LUCKHARDT: Okay.
- 13 HEARING OFFICER GEFTER: Are there any
- 14 objections to receiving exhibit 88 into the
- 15 record? Hearing no objections, exhibit 88 is now
- 16 received into the record.
- 17 Ms. Luckhardt, do you have cross-
- 18 examination of the witness?
- MS. LUCKHARDT: Just one question.
- 20 RECROSS-EXAMINATION
- 21 BY MS. LUCKHARDT:
- 22 Q In your response to applicant's
- 23 attorney, does that -- that is simply as an air
- 24 quality expert, is that true? That is not
- analyzing the gas system or the electric system,

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	1 9	that	correct?

- 2 A That's correct, thank you.
- 3 MS. LUCKHARDT: Thank you.
- 4 HEARING OFFICER GEFTER: Mr. Layton may
- 5 be excused. Staff are you sponsoring the
- 6 testimony of the Air District?
- 7 MR. OGATA: Yes, we are.
- 8 HEARING OFFICER GEFTER: Okay, we're
- 9 going to take a recess at this point. Let's go
- 10 off the record.
- 11 (Brief recess.)
- 12 HEARING OFFICER GEFTER: Back on the
- 13 record.
- Mr. Ogata, I understand you're going to
- be sponsoring the Air District's witnesses?
- MR. OGATA: That's correct.
- 17 HEARING OFFICER GEFTER: And also the
- 18 FDOC?
- MR. OGATA: That's correct.
- 20 HEARING OFFICER GEFTER: You may begin.
- 21 MR. OGATA: Thank you, Ms. Gefter.
- 22 At this time we'd like to call the
- 23 representatives from the Air District, Arthur
- 24 Carbonell, Steve Moore, Dan Speer, Ralph DiSienana
- and Mike Lake, and have them all sworn as a panel.

1	Mr. Carbonell will be the witness for
2	the final determination of compliance. But as I
3	indicated earlier, all these gentlemen will be
4	available to the Committee to respond to questions
5	that you may have about the Air District's rules,
6	regulations and policies.
7	HEARING OFFICER GEFTER: Would the
8	reporter swear the witnesses as a panel.
9	Whereupon,
10	ARTHUR CARBONELL, STEVEN MOORE, DANIEL SPEER,
11	RALPH DISIENANA and MICHAEL LAKE
12	were called as witnesses herein, and after first
13	having been duly sworn, were examined and
14	testified as follows:
15	HEARING OFFICER GEFTER: And then for
16	the record would each witness please introduce
17	yourself, tell us your name.
18	MR. LAKE: Michael Lake with the Air

- 20 HEARING OFFICER GEFTER: You need to
- 21 come to a microphone. You can sit right there.
- MR. LAKE: Michael Lake with the Air
- 23 Pollution Control District.

19 Pollution Control District.

- 24 HEARING OFFICER GEFTER: Thank you.
- 25 MR. DiSIENANA: Ralph DiSienana, Air

- 1 Pollution Control District.
- 2 MR. MOORE: Steve Moore, Air Pollution
- 3 Control District.
- 4 MR. CARBONELL: Arthur Carbonell, Air
- 5 Pollution Control District.
- 6 DIRECT EXAMINATION
- 7 BY MR. OGATA:
- 8 Q Mr. Carbonell, could you please tell us
- 9 your position at the Air District.
- 10 MR. CARBONELL: I was the Air Pollution
- 11 Control Engineer with the responsibility of
- writing the final determination of compliance for
- 13 the Otay Mesa project.
- MR. OGATA: Do you have any changes or
- 15 corrections you'd like to make at this time?
- MR. CARBONELL: No, I do not.
- 17 MR. OGATA: Ms. Gefter, I think for the
- 18 record we need to identify the final determination
- of compliance, the FDOC, as exhibit 93.
- 20 HEARING OFFICER GEFTER: Yes, that will
- 21 be identified as exhibit 93.
- MR. OGATA: Mr. Carbonell, could you
- 23 please summarize for us your testimony. Summarize
- the contents of the FDOC.
- 25 MR. CARBONELL: The FDOC basically

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analyzed the emissions from the Otay Mesa project
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- and found them to be, with the conditions of the
- 3 FDOC, to be in compliance with all the rules and
- 4 regulations of the District.
- 5 MR. OGATA: Can you explain a little bit
- 6 about the District's rules with respect to PM10?
- 7 MR. CARBONELL: What specifically about
- 8 PM10?
- 9 MR. OGATA: Do you have any conditions
- 10 with respect to PM10 emissions for the Otay Mesa
- 11 project?
- 12 MR. CARBONELL: Yes, we have hourly
- emission limits for PM10.
- 14 HEARING OFFICER GEFTER: What are those
- 15 emission limits? And how are they derived? Where
- 16 did you -- how are they established?
- 17 MR. CARBONELL: They were the estimated
- 18 maximum emissions provided by the applicant. And
- 19 annual source testing will show compliance with
- 20 the limit --
- 21 HEARING OFFICER GEFTER: How did you
- 22 arrive at the limit? Is that a regulation of the
- 23 Air District?
- MR. CARBONELL: No. It was the
- 25 estimated maximum from this project which was

1	l ar	nal	yzed	

- 2 HEARING OFFICER GEFTER: Is the reporter
- 3 hearing you, or could you move the microphone
- 4 closer, I think she's having trouble hearing you.
- 5 MR. OGATA: I have no further questions.
- 6 EXAMINATION
- 7 BY HEARING OFFICER GEFTER:
- 8 Q I think for the edification of the
- 9 Committee and for the intervenors, if one of the
- 10 witnesses from the Air District could explain to
- 11 us, give us a very quick overview of your
- jurisdiction and how it's derived, and how you
- incorporate both federal and state standards into
- 14 your rules.
- MR. MOORE: Steve Moore, APCD.
- 16 Basically our District rules and regulations are
- 17 to implement the Federal Clean Air Act and the
- 18 California Clean Air Act.
- 19 And we determine compliance with both of
- those statutes.
- 21 HEARING OFFICER GEFTER: Does the
- 22 applicant have any cross-examination of the
- 23 witnesses?
- MR. CARROLL: No, we do not at this
- 25 time.

1 HEARING OFFICER GEFTER: Okay

- 2 Cabrillo.
- MR. VARANINI: Yes, we have a couple
- 4 questions, and they really go to the two
- 5 gentlemen. Some of the gentlemen there I know
- 6 have been following the proceedings very
- 7 carefully, and others have been in on an
- 8 intermediate basis.
- 9 We have a couple of questions because of
- 10 concerns that have been related throughout the
- 11 record concerning rule 69, and the availability of
- gas and gas management and fuel management under
- 13 that rule.
- 14 And I'd just like to know which of the
- 15 gentlemen is the person who would like to testify
- on rule 69. Or do you just want me to ask the
- 17 questions, and you decide who wants to answer?
- 18 Perfectly okay.
- MR. MOORE: Just ask the questions.
- MR. VARANINI: Okay.
- 21 CROSS-EXAMINATION
- 22 BY MR. VARANINI:
- 23 Q Under rule 69 is gas curtailment a force
- 24 majeure? In order to burn fuel to maintain
- 25 electricity in the San Diego region?

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1 MR. MOORE: In some situations, yes.
2 MR. VARANINI: And can you give us just
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- 3 a brief discussion of those situations?
- 4 MR. MOORE: Obviously if there's an
- 5 earthquake and the gas supply is severed that
- 6 would be force majeure. It's likely that a run,
- 7 RMR situation, a must run situation would be force
- 8 majeure.
- 9 Right now the District is looking at
- 10 additional situations that might be considered
- 11 force majeure under the newly deregulated
- 12 electricity market.
- MR. VARANINI: And does the rule
- 14 literally discuss curtailment just as a term
- 15 curtailment as an event which brings forth force
- 16 majeure at this time?
- MR. MOORE: Yes, it does.
- MR. VARANINI: We have no further
- 19 questions.
- 20 HEARING OFFICER GEFTER: Duke Energy.
- 21 MS. LUCKHARDT: I'm just wondering if we
- 22 can enter the November 17, 2000 letter from the
- 23 Air District into the record. I'd just as soon,
- 24 since it was filed the last day that air quality
- 25 testimony was required, that it would have been an

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1 item, an exhibit for the record. And I'm
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- 2 wondering if anyone has any objection to having
- 3 that entered into the record.
- 4 HEARING OFFICER GEFTER: Okay, that
- 5 would be --
- 6 MS. LUCKHARDT: It's an Air District
- 7 letter to Commissioner Laurie and Robert Pernell,
- 8 dated November 17, 2000.
- 9 HEARING OFFICER GEFTER: It's identified
- 10 as exhibit 84 on our exhibit list. Does Duke want
- 11 to sponsor that letter?
- 12 MS. LUCKHARDT: I don't know that we can
- sponsor it since we don't have a witness, but
- 14 since the Air District drafted the letter and is
- 15 here today, I'm wondering if we could have them
- 16 enter it into the record. Would that be an
- 17 appropriate --
- 18 HEARING OFFICER GEFTER: It's on the
- 19 list as sponsored by the Committee, because I did
- 20 want it in the record.
- MS. LUCKHARDT: Oh, okay.
- 22 HEARING OFFICER GEFTER: You can ask
- 23 questions about exhibit 84 if you want to ask some
- 24 questions about it.
- MS. LUCKHARDT: No, that's fine. I

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1 guess I just missed that it was already an exhibit
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- 2 that you were planning on having into the record.
- 3 So I just want to make sure it got in.
- 4 HEARING OFFICER GEFTER: Is there any
- 5 objection from any party to having this letter a
- 6 part of our record?
- 7 MR. CARROLL: No objection.
- 8 HEARING OFFICER GEFTER: Okay, exhibit
- 9 84 will be admitted. Do you have questions,
- 10 because --
- MS. LUCKHARDT: No.
- 12 HEARING OFFICER GEFTER: -- this is your
- last chance to ask them. Okay.
- MR. CARROLL: I'm sorry to interrupt.
- 15 Along the same lines there was also a letter from
- 16 the District. It was submitted with Mr.
- 17 Caldwell's prepared testimony. It is an August
- 18 29, 2000 letter to Mr. Kent Williams at Cabrillo
- 19 Power One from Mr. Richard Smith at the District.
- 20 What we'd like to do is separate that
- letter from the testimony and ask that it be
- 22 marked as an exhibit and introduced into the
- 23 record.
- 24 HEARING OFFICER GEFTER: This was
- 25 prepared testimony of Mr. Caldwell. And tell us

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where we can find that, is that exhibit --
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- 2 MR. CARROLL: I'm sorry, it's part of
- 3 exhibit 75.
- 4 HEARING OFFICER GEFTER: Okay, we can
- 5 separate that letter. The letter is dated August
- 6 29th. It's to Cabrillo from the Air District.
- 7 And that will be exhibit 94.
- 8 And is the applicant sponsoring this
- 9 letter?
- 10 MR. CARROLL: We can sponsor the letter
- or ask that the District sponsor it.
- 12 HEARING OFFICER GEFTER: Well, the
- 13 District can't sponsor because they're not a
- 14 party.
- MR. CARROLL: Yes, we would like to
- sponsor the letter.
- 17 HEARING OFFICER GEFTER: Is there any
- 18 objection to this letter? Do you want to ask
- 19 questions about the letter, or do you want to ask
- 20 Cabrillo questions about the letter?
- MR. CARROLL: No, we don't.
- 22 HEARING OFFICER GEFTER: Is there any
- objections to exhibit 94 being received into the
- 24 record?
- MR. VARANINI: No.

1	HEARING	OFFICER	GEFTER:	All	right,
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- 2 exhibit 94 is received into the record.
- 3 MR. CARROLL: Thank you.
- 4 HEARING OFFICER GEFTER: Does Ms. Duncan
- 5 have questions of the Air District?
- 6 MS. DUNCAN: Yes, I do. Thank you.
- 7 CROSS-EXAMINATION
- 8 BY MS. DUNCAN:
- 9 Q You were just talking about the rule 69,
- 10 and you mentioned something, Mr. Moore, about the
- 11 deregulated market. Is it safe to say that the
- 12 rule 69 predates deregulation as it currently
- 13 stands?
- MR. MOORE: Yes.
- MS. DUNCAN: Have there been any
- 16 alterations to that rule as a result of
- 17 deregulation?
- MR. MOORE: No.
- 19 MS. DUNCAN: In terms of deregulation do
- 20 you think that this rule will be utilized more
- 21 frequently?
- MR. MOORE: I'm not sure what you mean
- 23 by that.
- MS. DUNCAN: Well, we have people asking
- 25 you about force majeure and one of your responses

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was that an example of that might be an RMR. And

- 2 that is a new animal, so to speak, as a result of
- 3 deregulation, is that correct?
- 4 MR. MOORE: I believe RMR has been
- 5 around for a long time.
- 6 MS. DUNCAN: Okay, so that would, I
- 7 guess what I'm hearing is we might be seeing more
- 8 force majeures as a result of deregulation?
- 9 That's what we've heard over the past few days
- 10 regarding the gas reliability issues, transmission
- issues.
- 12 MR. MOORE: It's not clear that force
- 13 majeure -- I assume you're speaking about gas
- 14 curtailment, is that correct?
- MS. DUNCAN: Um-hum.
- MR. MOORE: I think the situation with
- gas curtailment is because we do not have enough
- 18 gas supply in San Diego County right now, at least
- 19 that's what it appears to us, based on what we've
- seen so far.
- MS. DUNCAN: In terms of potential
- 22 emissions as a result possible -- potential
- emissions as a result of a situation like that,
- 24 how does my local Air Pollution Control District
- 25 intend to protect the public's health with the air

1	analita.	impacts?
_	quarrey	Impacts:

- 2 MR. MOORE: Everyone has to comply with
- 3 their permits basically, all the generating
- 4 utilities. And those conditions are designed to
- 5 protect the public health, they're based on our
- 6 rules and regulations.
- 7 MS. DUNCAN: So will RMR be considered
- 8 force majeure or not? Or it's --
- 9 MR. MOORE: It's likely --
- 10 MS. DUNCAN: -- based on an individual
- 11 case?
- 12 MR. MOORE: It's likely to be considered
- 13 a force majeure.
- MS. DUNCAN: Okay. Thank you, that's
- 15 all I wanted to ask.
- 16 HEARING OFFICER GEFTER: Mr. Claycomb.
- 17 MR. CLAYCOMB: No questions.
- 18 HEARING OFFICER GEFTER: All right.
- 19 Does Mr. Ogata have redirect?
- MR. OGATA: No.
- 21 HEARING OFFICER GEFTER: No, all right.
- 22 EXAMINATION
- 23 BY HEARING OFFICER GEFTER:
- Q With respect to rule 69 and the request
- 25 for variances, the requirements under rule 69 by

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1 Cabrillo and Duke, somebody from the Air District,

- 2 can you tell us what the status of those variances
- are, the requests and the actual granting of the
- 4 variances?
- 5 MR. MOORE: I can do that. I'm Steve
- 6 Moore.
- 7 Both the facilities have received a
- 8 variance. Encina Energy Facility has received a
- 9 variance from rule 69, from complying with the
- 10 emissions standards in rule 69. That's the .15
- 11 pounds per megawatt hour.
- 12 That standard would have gone into
- effect as of January 1, 2001, based on the fact
- 14 that the plant was sold by SDG&E. Had it not been
- sold there would have been an emission cap in
- 16 place that would have decreased over time. But
- 17 since the plant was sold, unit specific standards
- 18 went into effect.
- 19 They received a variance from that
- 20 standard until they could install selective
- 21 catalytic reduction equipment which would allow
- them to comply with the standard.
- 23 The variance has various dates when the
- units are supposed to be retrofitted with SCR.
- The last date, I believe, is July 1, 2003, when

1 the last unit would have SCR on it. At that point

- 2 they would all have SCR and would all be in
- 3 compliance with rule 69.
- 4 The other facility, Duke Energy Facility
- 5 at South Bay, received a variance for unit four.
- 6 Units one, two and three are expected to have SCR
- 7 on and be able to comply with the rule after they
- 8 start up.
- 9 I believe unit one already has SCR on;
- 10 unit two is down to get SCR on, and should have it
- on by the end of the year. Unit three will go
- down and get SCR in the spring of this year,
- 13 basically, and they'll all be able to comply with
- 14 .15.
- Unit four has a variance until right now
- 16 I believe it's September 29th of next year to
- 17 allow them time to install SCR and some additional
- 18 control equipment on that unit. At that time it
- 19 will be able to comply with the standards in rule
- 20 69.
- 21 HEARING OFFICER GEFTER: Is there, from
- 22 your understanding of these requests for
- variances, is there any requirement pending where
- 24 either South Bay or Encina will not be able to
- burn fuel oil after January 1, 2001?

1	MR.	MOORE:	Both	the	variances	have

- 2 emission caps in them that apply to the
- 3 facilities, as well, during the period of the
- 4 variance.
- 5 There is no requirement in the variance
- 6 that would preclude them from burning fuel oil.
- 7 In the case of the South Bay facility there's a
- 8 built-in provision that their cap basically makes
- 9 allowance for fuel oil burning. There's a stated
- 10 cap in there, but there is an allowance to adjust
- it for fuel oil burning.
- 12 In the case of the facility, Encina
- facility, there is a cap, and we would have to
- 14 take a look at the record of the variance granting
- 15 to decide whether or not there was any allowance
- for fuel oil burning. They can burn fuel oil, but
- 17 it would count against the cap. That's the bottom
- 18 line.
- 19 HEARING OFFICER GEFTER: Is the cap a
- 20 year-long cap or how is it calculated?
- 21 MR. MOORE: It's a cap until the end of
- the variance.
- 23 HEARING OFFICER GEFTER: Is it
- 24 calculated on a daily basis or --
- MR. MOORE: It's an annual --

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1 HEARING OFFICER GEFTER: -- is it --
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- 2 it's an annual.
- 3 MR. MOORE: -- it's an annual cap.
- 4 HEARING OFFICER GEFTER: That's what my
- 5 question was.
- 6 MR. LAKE: If I could provide just a
- 7 little bit more information. Michael Lake with
- 8 the Air Pollution Control District.
- 9 What Steve was referring to with regard
- 10 to the variances was in reference to force majeure
- oil burning.
- 12 Economic oil burning is not allowed as
- of January 1, 2001 under the permits to operate
- 14 for the two power plants. And that was a
- 15 condition that was imposed as a result of the sale
- of the power plants by the PUC.
- 17 HEARING OFFICER GEFTER: And, again, the
- definition of force majeure would be primarily
- 19 either some sort of like an earthquake situation,
- or an RMR contract request, is that --
- 21 MR. LAKE: Well, those would almost
- 22 certainly be considered. There might be other
- 23 conditions that would qualify as force majeure
- that we're looking at.
- 25 There are other aspects to the

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definition of force majeure in rule 69 that deal
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- with whether or not the gas curtailment is
- 3 unforeseen and also beyond the control of the
- 4 power plant operator.
- 5 So we're still investigating that aspect
- of those situations that might also qualify for
- 7 force majeure.
- 8 (Pause.)
- 9 HEARING OFFICER GEFTER: Back to the
- 10 question about the annual cap for both the Encina
- 11 and South Bay projects. Is there an actual
- 12 definition in the variances with respect to the
- 13 cap?
- MR. MOORE: Do you mean how large it is?
- 15 Yes, there is.
- 16 HEARING OFFICER GEFTER: Do you know it
- offhand, or is it accessible to staff and the
- 18 applicant?
- MR. MOORE: Yeah, we can look it up.
- 20 HEARING OFFICER GEFTER: Okay. And
- 21 that's with respect to each of the units at each
- of these projects?
- MR. MOORE: It's an overall cap on the
- 24 entire facility.
- 25 HEARING OFFICER GEFTER: On the whole

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facility, okay. And when you say it's an annual

- 2 cap, does it go from January 1 to December 31st of
- 3 each year?
- 4 MR. MOORE: Yes.
- 5 HEARING OFFICER GEFTER: And, again,
- 6 beginning January 1, the cap only applies to force
- 7 majeure events, is that what we have heard you
- 8 say?
- 9 MR. MOORE: The cap applies to all the
- 10 emissions from the facility. What Mike Lake was
- 11 saying was that they can only burn oil through
- 12 force majeure after January 1st because of permit
- condition that was a result of the CEQA analysis
- done for the sale of the SDG&E plants.
- 15 HEARING OFFICER GEFTER: We're looking
- 16 at the variance from the South Bay unit four.
- 17 There is -- emissions from South Bay are limited
- to 259 tons per calendar year commencing on
- January 1, 2000. Is that the cap for the entire
- 20 plant?
- MR. MOORE: That's right.
- 22 HEARING OFFICER GEFTER: Do you know
- 23 what it is for --
- MR. MOORE: It's 419 tons per year for
- 25 Encina.

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1 HEARING OFFICER GEFTER: For Encina.
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- 2 MS. LUCKHARDT: Just to clarify the
- 3 record, the variance order has not yet been
- 4 issued. You may be looking at the application for
- 5 the variance.
- 6 HEARING OFFICER GEFTER: We're looking
- 7 at a letter that was signed by the Hearing Board.
- 8 MS. LUCKHARDT: Do you have the --
- 9 PRESIDING MEMBER LAURIE: Yeah, I don't
- 10 think that's a Board --
- 11 MS. LUCKHARDT: -- has the variance --
- 12 PRESIDING MEMBER LAURIE: -- I think
- that's a District Staff letter.
- 14 HEARING OFFICER GEFTER: Maybe so, yeah.
- 15 All right, it's a staff letter.
- MR. MOORE: She's quite correct, the
- 17 Hearing Board order has not come down yet, but --
- 18 HEARING OFFICER GEFTER: All right.
- 19 MR. MOORE: -- there's not going to be
- any change, I don't believe, in the cap.
- 21 HEARING OFFICER GEFTER: Okay. Thank
- 22 you.
- 23 If SDG&E had not sold these plants to
- Duke and to Cabrillo, would the limits have been
- 25 different?

1	MR. MOORE: There would have been no
2	specific limits on any of the units. They would
3	have just had to comply with a cap. It would have
4	decreased to 800 tons. It was 2100 tons up until
5	the end of this year, and it would have decreased
6	to 800 tons starting January 1st of next year.
7	HEARING OFFICER GEFTER: So the caps on
8	these projects then, as a result of the sale, were
9	imposed as a result of your CEQA analysis?
10	MR. MOORE: The requirement for force
11	majeure, only burning oil in case of force
12	majeure, was applied as a result of the CEQA
13	analysis. And the caps were also applied in the
14	interim until the new standards took effect the
15	first of this year.
16	I should all, there's some allowance for
17	burning oil for testing and things like that in
18	addition to force majeure. But it's a limited
19	amount.
20	HEARING OFFICER GEFTER: With respect to
21	the Otay Mesa project, could this project be
22	permanent as a dual fuel project, could it be
23	allowed to burn fuel oil instead of natural gas in
24	the event of a gas curtailment?
25	MR MOORE: I guess the answer to that

is we don't know, we have not evaluated it for

- 2 burning alternate fuels. The project, as given to
- 3 us, was only for burning natural gas.
- 4 HEARING OFFICER GEFTER: Does any other
- 5 party have questions of the witnesses before they
- 6 are excused?
- 7 MR. CARROLL: Just one follow-up
- 8 question in response to the response to the last
- 9 question.
- 10 CROSS-EXAMINATION
- 11 BY MR. CARROLL:
- 12 Q For anyone on the District Staff, in
- terms of the best available control technology
- 14 requirements for PM10 and sulfur emissions issued
- 15 by the California Air Resources Board, do you know
- 16 what the BACT requirement is for projects like
- 17 Otay Mesa?
- MR. MOORE: We would have to look that
- 19 up. I believe BACT is natural gas burning for
- 20 both PM10 and the sulfur with the limit on the
- 21 sulfur content.
- MR. CARROLL: Thank you.
- MR. VARANINI: I have a question.
- 24 //
- 25 //

1	CROSS-EXAMINATION
2	BY MR. VARANINI:
3	Q To the best of your knowledge would a
4	propane or compressed natural gas backup
5	essentially meet BACT requirements?
6	MR. MOORE: I assume compressed natural
7	gas would meet the BACT requirements, since it
8	would still be firing natural gas just like it is
9	now, just a different source.
10	Propane probably. We haven't evaluated
11	it, but probably.
12	MR. VARANINI: Thank you.
13	HEARING OFFICER GEFTER: The Air
14	District witnesses may be excused. However, we
15	would ask at least one or two of you could stay
16	around for awhile depending on additional
17	testimony that we may hear from other witnesses on
18	air quality.
19	Thank you very much.
20	MR. OGATA: Ms. Gefter, at this point
21	I'd like to move exhibit 93 into the record.
22	HEARING OFFICER GEFTER: Any objection
23	to receiving exhibit 93, which is the FDOC, into
24	the record?

MR. CARROLL: No objection.

1	HEARING OFFICER GEFTER: Hearing no
2	objections, exhibit 93 is now received into the
3	record.
4	MR. OGATA: And on behalf of staff we
5	would certainly like to thank the Staff at the Air
6	District and Deputy County Counsel Terry Dutton.
7	They've been extremely extremely helpful and
8	cooperative to staff. So we want to extend our
9	thanks.
10	HEARING OFFICER GEFTER: Does staff have
11	any other witnesses on air quality?
12	MR. OGATA: No, we do not.
13	MR. CARROLL: Ms. Gefter, point of
14	clarification on the exhibits. We would also like
15	to request that certain exhibits that were part of
16	the discussion that we just had be moved into the
17	record, some of which have been marked, some of

Exhibit 86 is the package related to the

Duke Energy South Bay variance. It begins with a

cover letter from the staff which you referred to,

November 8, 2000 cover letter.

which have not been marked.

18

23 The variance packet which has been 24 served on the parties by applicant, but not marked 25 as an exhibit, the variance package with Cabrillo

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1 Power One LLC, which is the Board order, as I
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- 2 said, has not been marked as an exhibit, but we'd
- 3 like to have that marked and have both of those
- 4 moved into the record.
- In addition to that we have a copy, at
- 6 this time only one copy, of the mitigated negative
- 7 declaration issued by the CPUC which resulted in
- 8 the existing conditions in the permits that were
- 9 discussed. And if the Committee thinks that that
- 10 would be helpful to have that in the record, we'd
- 11 be happy to make copies of that and sponsor that,
- 12 as well.
- MS. LUCKHARDT: I would have to object
- 14 to that at this point since I haven't seen that
- 15 document.
- 16 HEARING OFFICER GEFTER: We'd like to
- see it, in that we can identify it.
- 18 MR. CARROLL: Sure, absolutely. That
- 19 was actually the offer, was if people thought it
- 20 would be helpful we would make copies so that
- 21 everybody could look at it, and then seek to have
- it introduced. And we will do that.
- MR. GOLDMAN: I'm concerned that the
- 24 document regarding Cabrillo may be obsolete. It
- 25 may not be the most recent filing, but I'm not

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1 sure because I have not seen the document.
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- 2 HEARING OFFICER GEFTER: With respect to
- 3 the variance package?
- 4 MR. GOLDMAN: Yes.
- 5 HEARING OFFICER GEFTER: Okay, if we
- 6 could get the most recent document, then that
- 7 would be marked as exhibit 95.
- 8 MR. CARROLL: With respect to Cabrillo,
- 9 I don't believe it's been superseded. This is the
- 10 final Board order that was issued dated October
- 11 14, 1999.
- MR. GOLDMAN: I'm informed that a
- 13 subsequent order has superseded that.
- 14 HEARING OFFICER GEFTER: If the parties
- can provide that to us, then we would substitute
- that into exhibit 95, the most recent Hearing
- 17 Board order on the variance package for Cabrillo.
- MR. VARANINI: That's fine.
- 19 HEARING OFFICER GEFTER: All right. At
- 20 this point is there objection to exhibits 86 and
- 21 95 being received into the record? Hearing no
- objection, --
- MS. LUCKHARDT: Still trying to figure
- out what -- so the November 8th -- is that the
- entire November 8th package, 95?

1 MR. CARROLL: Ye	s.
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- 2 HEARING OFFICER GEFTER: 86.
- 3 MR. CARROLL: Oh, I'm sorry, yes, 86.
- 4 HEARING OFFICER GEFTER: 86 is Duke
- 5 Energy's package. 95 is Cabrillo's package.
- 6 Apparently Cabrillo has a recent Hearing Board
- 7 order. And my understanding is that Duke is
- 8 pending the Hearing Board order, correct?
- 9 MS. LUCKHARDT: Yeah, that's fine, we've
- 10 talked about it. It's here.
- 11 HEARING OFFICER GEFTER: Okay. Well,
- what we'll do is with exhibit 86, at such time
- that the Hearing Board order is filed, we will
- 14 substitute the package, we will actually add the
- 15 Hearing Board order to the package.
- 16 And with respect to exhibit 95, we will
- 17 add the most recent Hearing Board order to that
- 18 package.
- MR. CARROLL: Thank you.
- 20 HEARING OFFICER GEFTER: Hearing no
- objection, exhibits 86 and 95 are received into
- 22 the record with the proviso that I just described.
- 23 At this point we understand that
- 24 Cabrillo has a witness on air quality.
- 25 MR. VARANINI: Cabrillo calls Gary

1 Rubenstein. He needs to be sworn.

- Whereupon,
- 3 GARY RUBENSTEIN
- 4 was called as a witness herein, and after first
- 5 having been duly sworn, was examined and testified
- 6 as follows:
- 7 DIRECT EXAMINATION
- 8 BY MR. VARANINI:
- 9 Q Mr. Rubenstein, would you identify
- 10 yourself and indicate your background for the
- 11 Commission.
- 12 A My name is Gary Rubenstein; I'm a Senior
- 13 Partner with the firm of Sierra Research, an air
- 14 quality consulting firm based in Sacramento,
- 15 California. I have been working in the field of
- 16 air pollution control for approximately 28 years
- 17 now.
- 18 That includes a period of seven years
- 19 with the Staff of the California Air Resources
- 20 Board and 19 years with Sierra Research.
- I have participated in a number of
- 22 proceedings before this Commission over the last
- 23 20-odd years, which were listed in my written
- 24 testimony.
- 25 And my particular expertise is in the

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area of air emissions from a variety of different
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- 2 types of industrial facilities, specifically
- 3 including power plants.
- 4 Q Did you prepare the testimony of some 15
- 5 pages including appendices and charts for this
- 6 proceeding?
- 7 A Yes, I did.
- 8 Q And do you have any changes, additions
- 9 or corrections to that material?
- 10 A No, I do not.
- 11 Q Is that material true and correct to the
- 12 best of your knowledge?
- 13 A Yes, it is.
- 14 Q And was it prepared by you or under your
- 15 direction?
- 16 A Yes, it was.
- 17 HEARING OFFICER GEFTER: Mr. Varanini,
- 18 that testimony of Gary Rubenstein is identified as
- 19 exhibit 82 in our exhibit list.
- 20 BY MR. VARANINI:
- 21 Q Would you like to summarize your
- testimony, please.
- 23 A I'd be happy to. First of all, let me
- 24 clearly state for the record that I am not here
- 25 today in opposition to the Otay Mesa Generating

1 Project.

2	In specific response to the questions by
3	Commissioner Laurie yesterday afternoon regarding
4	sort of an XYZ explanation of what the issue is
5	regarding gas availability and specifically how
6	that relates to air emissions, I'd like to discuss
7	this first in the context of an analogy that the
8	Commission is very familiar with because you
9	discussed it this morning, which has to do with
10	the PM10 air quality impacts from this project.
11	As you heard, there are existing
12	violations of the state ambient air quality
13	standard for PM10. Analogously, as exhibited most
14	recently last week, there are existing conditions
15	that can lead to a curtailment of natural gas
16	supplies to the Encina and South Bay Power Plants
17	forcing them to convert to burn number 6 oil.
18	Going back to the PM10 analogy, the
19	Commission Staff properly asked whether the Otay
20	Mesa project would cause a new violation of the
21	state PM10 air quality standard.
22	Similarly, we believe the question
23	that's before this Commission is will the Otay
24	Mesa project cause additional curtailments to the
25	natural gas supplies to the two existing power

1 plants.

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2	Going back to the PM10 analogy now,
3	through a very extensive dispersion modeling
4	analysis the Commission Staff concluded that the
5	Otay Mesa project would not, in fact, cause any
6	new violations of the state PM10 standard.
7	In testimony that you heard yesterday
8	from Mr. Weatherwax, which I'll discuss a little
9	bit more, Mr. Weatherwax concluded somewhat to the
10	contrary that the Otay Mesa project could cause
11	additional curtailments of natural gas or
12	increased severity of existing curtailments.
13	Going back to the PM10 analogy, the
14	Commission Staff concluded that even though there
15	was not a new violation of the PM10 standard
16	attributable to the Otay Mesa project, nonetheless
17	the staff concluded that the impacts were
18	significant.
19	And through my testimony I believe I
20	will show that in the case of curtailment that
21	similarly an increased likelihood of curtailment
22	will result in significant air quality impacts.
23	The conclusion here is that just because

there is an existing condition, whether it is

existing violations of the state PM10 standard, or

1 existing gas supply restrictions that lead to gas

- 2 curtailments, just because there's an existing
- 3 condition does not mean that you can ignore the
- 4 incremental impacts of this project.
- 5 Next let me turn to the issue
- 6 specifically addressed in my written testimony
- 7 which is what is the effect of curtailment on air
- 8 emissions in the region.
- 9 I believe Mr. Ogata yesterday afternoon
- indicated that the staff had a great deal of
- 11 difficulty trying to define what kind of a
- scenario to analyze because there were so many
- 13 variables. I'm quite sympathetic to that, I
- struggled with exactly the same problem.
- 15 Ultimately what I chose to do is to
- 16 bifurcate the analysis. My testimony in writing
- 17 did not attempt to determine what the increase in
- 18 frequency would be or what the increase in extent
- of curtailments would be.
- 20 Rather I specifically answered the
- 21 question, what are the increases in emissions
- 22 associated with the curtailment of one day of
- 23 various degrees. And I selected, just to present
- to the Committee, a range of curtailment
- 25 scenarios.

1	A 10 percent curtailment scenario,
2	meaning 10 percent of the heat input to the two
3	plants would have to be replaced with fuel oil. A
4	20 percent curtailment scenario; a 50 percent
5	curtailment scenario; and a 100 percent
6	curtailment scenario.
7	Again, in saying that I'm not commenting
8	at this point on the likelihood of any one of
9	these scenarios occurring; I'm simply presenting
10	the air emissions impacts associated with those
11	scenarios.
12	The assumptions that I used in
13	developing those scenarios are presented on pages
14	7 and 8 of my testimony. The detail emission
15	calculations are presented on pages 9 through 13.
16	And if you look, for example, at page 14
17	of my testimony is a bar chart. And what this
18	chart shows is the emissions from the Encina and
19	South Bay Power Plants, and how those emissions,
20	in particular of ozone precursors, hydrocarbons
21	and NOx, would be affected by various degrees of
22	curtailment.
23	Remember in looking at these analyses
24	I'm looking at a single day's curtailment, 24
25	hours.

1 And what you can see is that in the 2 extreme case where a full curtailment occurs, that 3 the increased emissions on that single day 4 represent the difference between roughly 22,000 5 pounds and 8000 pounds, for a difference of 14,000 6 pounds, or 7 tons of emissions in one day. This Commission is used to dealing with emissions 8 presented in tons per year. 9 If you take a look at the next page, 10 which looks at PM10 precursors, one thing I have 11 to caution you about is that the scale on the left-hand side of the bar chart, this is on page 12 13 15, is ten times higher. It goes up to 250,000

And a single day's curtailment, full curtailment at both power plants would result in an increase in emissions of PM10 precursors, as you can see, the difference between roughly 230,000 pounds and about 10,000 pounds.

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pounds.

HEARING OFFICER GEFTER: Sorry to interrupt your direct, but a quick question with respect to the caps. With these scenarios that you're presenting in these tables, would these scenarios occur under the caps that have been established in the rule 69?

1	MR. RUBENSTEIN: The caps only affect
2	one pollutant, oxides of nitrogen emissions. And
3	my analysis looked at all pollutants.
4	The caps would have no impact on this on
5	any individual day because the caps are annual
6	caps.
7	Concluding what I was going to say about
8	the figure on page 15, the increase in emissions
9	total PM10 precursors for one day's curtailment of
10	both facilities would be over 100 tons in one day.
11	Having set that out, though, that
12	doesn't really provide you with a frame of
13	reference to evaluate what the probability is of
14	any of these different levels of curtailment.
15	Obviously the impacts are much smaller if a
16	curtailment is less.
17	We have the ability, regrettably, to
18	look at the events of last week and try to place
19	that into some perspective.
20	I spoke with operators at both the
21	Encina and South Bay Power Plants to learn exactly
22	how much fuel oil those plants burned during last
23	week's curtailments.

The South Bay Power Plant burned

approximately 13,000 barrels of number 6 oil last

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1 week. And the Encina Power Plant burned over
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- 2 16,000 barrels of oil.
- 3 COMMISSIONER PERNELL: How long is that
- 4 in relationship to time?
- 5 MR. RUBENSTEIN: That was over a period
- 6 of approximately five days. Monday through Friday
- 7 with the curtailments operating --
- 8 COMMISSIONER PERNELL: At 24 hours a
- 9 day?
- 10 MR. RUBENSTEIN: No, varying degrees of
- operation. This is how much they actually burned.
- 12 The curtailments occurred for the Encina plant for
- two or three days last week; and for the South Bay
- 14 plant two or three days last week. And there was
- 15 not a complete overlap.
- 16 COMMISSIONER PERNELL: In your scenario
- 17 you're saying 24 hours a day and coming up with
- 18 the, on your chart here on page 14 --
- MR. RUBENSTEIN: My hypothetical
- 20 scenarios are all based on 24 hours, that's
- 21 correct.
- 22 COMMISSIONER PERNELL: Right, and I
- 23 guess my question is, either to you or the Air
- District, is that the norm, that there would be a
- 25 24 hour a day curtailment burning of fuel oil?

1	MR. RUBENSTEIN: I can answer that
2	question with respect to last week's curtailments,
3	each of the facilities was curtailed for a period
4	of at least 20, and in some cases 24 hours.
5	The curtailments were not short. They
6	were not a matter of minutes or a few hours. They
7	were extensive.
8	Again, looking at the two totals for the
9	two plants, there was, as I said, a total of
10	approximately 30,000 barrels of number six oil
11	burned at those two plants last week.
12	Converting from barrels to gallons, so
13	that you can then compare with the summary table
14	that I have on page 13 of my testimony, the total
15	amount of fuel oil burned at the two plants is
16	approximately 1250-thousand gallons, 1.25 million
17	gallons of number six oil.
18	That was spread out in a rather uneven
19	manner over a period of five days, Monday through
20	Friday. On average last week 250,000 gallons of
21	fuel oil were burned at each of at the total
22	for the two plants.

If you take a look at the table on page

13 of my testimony, and if you go to the bottom

part of the table where it says incremental daily

1 emissions compared with basecase. And then if you

- 2 next look at the column entitled oil use in
- 3 thousands of gallons, you will see that the 10
- 4 percent curtailment case is equivalent to
- 5 approximately 237,000 gallons of oil in a 24-hour
- 6 period.
- 7 Consequently, what we saw last week was
- 8 the scenario that I had developed as a 10 percent
- 9 curtailment scenario and it persisted for five
- 10 days.
- 11 And that's, again, just to put into
- 12 perspective my hypothetical scenarios and compare
- 13 them with what actually happened here in San Diego
- last week.
- 15 Let's explore further what that meant in
- 16 terms of air emissions in San Diego. Going across
- 17 the remainder of that line at the bottom of the
- table, the line for the 10 percent curtailment,
- and then going to convert from pounds per day into
- 20 tons so we have some smaller numbers to deal with,
- 21 on each day that that curtailment persisted we had
- increases in emissions of approximately .4 tons
- per day of NOx, 1 ton per day of particulates, and
- 9 tons per day of SOx.
- Now, let me clarify that for a moment.

1 I just said that's the increases we actually had

- 2 last week. That's not quite correct. For
- 3 purposes of my analysis, which was looking forward
- 4 at the year 2003 when the Otay Mesa plant would be
- 5 on line, I assumed that there were more advanced
- 6 emission controls installed at both Encina and at
- 7 South Bay, as required by the variances you just
- 8 heard discussed.
- 9 And in particular I assumed that Encina
- 10 Units four and five had full SCR retrofits
- 11 completed. That South Bay Units one, two and
- 12 three had full SCR retrofits completed, and South
- 13 Bay Unit four had a partial SCR retrofit
- 14 completed.
- 15 And so the emissions increases that I'm
- 16 talking about here take into account the more
- 17 advanced emission controls that are going to be
- installed in those facilities over the next two
- 19 years.
- 20 But if the events of last week were to
- 21 recur in 2003, the increases would be on each day
- of the five-day event, 9 tons per day of SOx, one
- ton per day of PM10, and .4 tons per day of NOx.
- 24 The total for the one week event, and it
- 25 was just a single event that was scattered over

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1 the five days, is 45 tons of SOx, 5 tons of
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- 2 particulate and 2 tons of NOx, or for a total of
- 3 all the PM10 precursors of 52 tons.
- 4 What does that mean? You heard
- 5 discussions this morning about how do you decide
- 6 whether an impact is significant or not. One way
- 7 you can evaluate that is by taking a look at past
- 8 Commission decisions.
- 9 And most specifically what I took a look
- 10 at was the recent decision by this Commission to
- 11 approve the Moss Landing project.
- 12 In approving that project the Commission
- 13 Staff and the Committee and the Commission
- 14 concluded that the combustion emissions associated
- 15 with the construction of that project represented
- 16 a significant air quality impact that required
- 17 mitigation.
- 18 The construction emissions from the Moss
- 19 Landing project consisted of approximately 38 tons
- 20 per year of NOx, 2.5 tons per year of
- 21 particulates, and one ton per year of SOx, for a
- 22 total of 41 tons per year of PM10 precursors.
- 23 That 41 ton per year impact was deemed significant
- 24 by the Commission.
- 25 A one-week curtailment like the one we

1 had last week, if it occurs in the future with new

- 2 emission controls on the Encina and South Bay
- 3 units, would generate 52 tons. One week.
- 4 HEARING OFFICER GEFTER: You're talking
- 5 52 tons of all pollutants?
- 6 MR. GOLDMAN: Of all of the PM10
- 7 precursors.
- 8 HEARING OFFICER GEFTER: PM10
- 9 precursors, and with the Air District's cap on
- 10 these projects, and the cap apparently will become
- 11 lower by the year 2003, and you indicated the cap
- was for NOx.
- MR. RUBENSTEIN: That's correct.
- 14 HEARING OFFICER GEFTER: But even if the
- 15 cap is -- please explain that.
- MR. RUBENSTEIN: Sure.
- 17 HEARING OFFICER GEFTER: Even if there
- is a cap on NOx, it would mean that the fuel oil
- 19 can't be burned and produce the other precursors
- 20 because it would produce NOx above the cap limits?
- 21 MR. GOLDMAN: No, it would not produce
- NOx above the cap limits.
- The analysis that I did indicated that a
- one-week curtailment like we had last week would
- generate only two tons of excess NOx. And with a

1 total cap for the two facilities on the order of

- 2 800 tons, the 2 ton increase in NOx would not be
- 3 determinative.
- 4 Those plants could continue to comply
- 5 with the cap, and you would have significant
- 6 increases, and those increases largely come from
- 7 direct particulate emissions and from sulfur
- 8 dioxide emissions.
- 9 To put it into another perspective, you
- 10 heard discussions yesterday about disagreements
- 11 about how large a curtailment one could
- 12 anticipate.
- 13 Looking again at the table I have on
- 14 page 13 and looking at the 10 percent curtailment
- line, the scenario we're looking at, the analyses
- 16 that I was doing showed roughly a 237,000 gallon
- fuel oil use for a single day, and a gas
- 18 curtailment of 35 million cubic feet.
- 19 And remember, yesterday you heard
- 20 discussions about whether the correct number was
- 21 360 or 290 or 200. We're talking about very
- 22 significant impacts from much lower levels of
- 23 curtailment than you heard discussed yesterday.
- 24 The next question that I believe the
- 25 Commission has to look at is what is the

1 likelihood. Is it reasonably foreseeable that

- 2 operation of the Otay Mesa project will cause
- 3 increases in either the frequency or the severity
- of curtailments. And as I've shown, even a small
- 5 increase produces a significant impact.
- 6 One issue that you heard discussed
- 7 yesterday that could lead to the increased
- 8 frequency and severity of curtailments was in Bob
- 9 Weatherwax's testimony where he discussed very
- 10 specifically the gas supply constraint, and how he
- 11 believes that that constraint could lead to
- increased curtailments. And in particular I'm
- 13 referring to the discussion on page 8 of his
- 14 testimony.
- 15 In addition you heard a more passing
- 16 discussion to an impact that I believe may be even
- 17 more significant which has to do with transmission
- 18 constraints.
- 19 And here I'm referring to the discussion
- on page 5 of Mr. Weatherwax's testimony in which
- 21 he indicated that in order for the Otay Mesa plant
- 22 to operate at 510 megawatts, its rated capacity,
- given the current transmission constraints in San
- Diego, the Encina plant would have to generate at
- least 230 megawatts. And the South Bay plant

1 would have to generate at least 630 megawatts.

I took a look at actual hour-by-hour

3 operating data from each unit at the two plants

4 for the month of July of this year.

significant impact.

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As we all know, July was a pretty severe test for the power generation system in

California. This whole summer has. And one would expect that Encina and South Bay plants would have been dispatched pretty heavily throughout that entire month, and so this kind of a minimum generation constraint would not have produced a

In fact, I found that in July there were 152 hours where the Encina load total was less than 230 megawatts, and that's it would have had to generate additional power just in order to allow Otay Mesa to reach its 510 megawatt capacity.

Over the course of the entire month, the month of July, Encina would have had to generate over 10,000 megawatt hours of additional power.

Taking a look further at where the generation occurred, it was principally at night, where the loads had dropped off and the Encina plant had backed off to lower loads.

1	However,	tne	Otay	Mesa	prant,	being	а

- 2 more efficient plant, might very well have been in
- 3 the market at full capacity during the night. And
- were that the case, it would have forced the
- 5 Encina plant to run more to maintain system
- 6 reliability.
- 7 The situation at South Bay was even
- 8 worse. Again, based on Mr. Weatherwax's
- 9 testimony, he concluded that South Bay would have
- 10 to operate at a minimum load of 630 megawatts to
- 11 support full load generation at Otay Mesa.
- 12 During the month of July 2000 when the
- 13 South Bay plant was running quite a bit, I found
- 14 687 hours where the generation was less than 630,
- and thus additional generation would have been
- 16 required to make up the difference.
- 17 MR. CARROLL: Excuse me, I apologize for
- 18 interrupting, and I recognize that the intervenor
- 19 has wide latitude in their direct testimony.
- 20 But in the last two or three minutes are
- 21 not related to air quality at all. They're
- 22 transmission issues. And I guess I'm a little
- 23 confused --
- MR. RUBENSTEIN: I will get to an
- emission number in about two minutes.

T	HEARING	OFFICER	GEFIER.	well,	

- 2 MR. CARROLL: Well, lacking a foundation
- 3 I --
- 4 MR. VARANINI: I think that the process
- 5 really is prefatory in the sense that instead of
- 6 having me play pitch and catch, essentially what's
- 7 going on is that in a much more competent and
- 8 coherent way the witness is basically providing
- 9 the foundation for where he's going and how he
- 10 arrived at his conclusions.
- It seems to us that we listen carefully
- 12 to the admonition of the Hearing Officer and the
- 13 Presiding Member to try to let our witnesses go on
- 14 and give you a coherent picture, and then be taken
- apart, if they can, by the other lawyers.
- I think, as well, we thought very hard
- 17 last night about the Commissioner's direction.
- 18 And I think an awful lot of work went into that
- 19 direction. And when Mr. Rubenstein completes his
- 20 testimony and completes the cross, we're going to
- 21 make an offer of proof to try to tie all these
- 22 things in and give essentially a direct answer to
- 23 that XYZ directive.
- 24 But, in any event, I think these are
- 25 just foundational matters just like the staff

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1 witness; in order to do an air analysis, Mr.
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- 2 Rubenstein has to rely on inputs, and he's telling
- 3 you what those inputs are. And he's not
- 4 testifying independently or trying to be a triple
- 5 threat. He's just a single vicious threat.
- 6 And essentially what he's going to do is
- 7 to get to the point, lay out why this is a
- 8 significant impact, and what we ought to do about
- 9 it.
- 10 MR. CARROLL: I don't have any problem
- 11 with the witness providing a comprehensive
- 12 picture. I'm not suggesting this needs to be
- 13 question and answer, but at the same time the
- 14 witness is only competent to testify within his
- 15 area of expertise.
- And I disagree that he is building upon
- 17 what Mr. Weatherwax said. In fact, he is
- 18 providing us his own independent analysis on the
- 19 electric transmission issues.
- 20 HEARING OFFICER GEFTER: I tend to agree
- 21 with what Mr. Carroll is saying. I would admonish
- 22 the witness to stick with your area of expertise,
- 23 which is air quality.
- I've been listening to you also the last
- 25 several minutes, and you've been talking about the

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1 amount of generation both Encina and Duke would
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- 2 have been required to produce if Otay were on
- 3 line.
- 4 That was not part of your analysis. And
- 5 I would just request that you stick with your air
- 6 quality analysis.
- 7 MR. VARANINI: Ma'am, the --
- 8 HEARING OFFICER GEFTER: The conclusions
- 9 that Mr. Varanini says that you're getting to, we
- 10 would hear those.
- 11 MS. DUNCAN: May I ask a question for
- 12 clarification?
- 13 HEARING OFFICER GEFTER: All right.
- MS. DUNCAN: In staff's analysis Matt
- said he relied on Mr. Wood's analysis. Isn't that
- what's going on here?
- MR. CARROLL: No. I don't have any
- 18 problem with his relying on Mr. Weatherwax's
- 19 analysis to the extent there was any, but he is
- stating his own analysis.
- 21 MS. DUNCAN: But that's his testimony,
- 22 isn't it?
- 23 MR. CARROLL: Yes, but it's outside of
- 24 his area of expertise.
- 25 HEARING OFFICER GEFTER: All right,

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we've already ruled, and we've asked Mr.
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- 2 Rubenstein to continue and stick with your
- 3 testimony with respect to air quality.
- 4 MR. GOLDMAN: I will, Ms. Gefter. Let
- 5 me just also point out that the data that I looked
- 6 at are data that we had collected at the request
- 7 of the Air District several months ago in
- 8 addressing issues related to rule 69.
- 9 We analyzed the data answering a
- 10 different question for the Air District. And so I
- 11 believe I am competent to look at the data here.
- 12 The bottomline that I was getting to is
- 13 that if Mr. Weatherwax was correct in that there
- is a minimum generation requirement associated
- with the Otay Mesa plant that impacts operations
- 16 at Encina and South Bay; and assuming that all of
- 17 the extra generation at those plants comes from
- 18 units equipped with selective catalytic reduction,
- 19 the increase in NOx emissions in July of this year
- would have been nearly 18 tons of NOx.
- 21 And on an annual basis -- remember I
- 22 said earlier that I believed July would have been
- 23 a worst case, a minimum impact, the minimum
- increase in emissions would be over 200 tons per
- year of NOx due to the transmission constraint, if

1 Mr. Weatherwax's conclusions were correct.

2 Consequently, I believe that if there is 3 an increase in curtailment of natural gas supplies 4 that is reasonably foreseeable, and if the impacts 5 are comparable from that increase to what we actually experienced last week, and if that occurs for only a couple of years until the transmission 8 and gas supply constraints are relieved, you have a situation that in terms of emissions impacts is 10 exactly comparable to other situations this 11 Commission has concluded represent significant air 12 quality impacts.

And if the impacts are significant what do you need to do? I believe you need to find mitigation for those impacts.

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And that mitigation could be in the form of prohibiting either the construction or operation of the Otay Mesa Power Plant until a demonstration is made that there are no gas supply constraints as of the date the project begins operating based on fully approved projects that would affect operations at Encina or South Bay.

And similarly, that there are no transmission constraints that would require increased generation at the Encina and South Bay

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- 2 That concludes my direct testimony.
- 3 EXAMINATION
- 4 BY HEARING OFFICER GEFTER:
- Q In the absence of Otay Mesa what would you propose to mitigate this output of the Encina and South Bay plants, if there were no Otay Mesa?
- 8 MR. RUBENSTEIN: If there were no Otay
 9 Mesa project, with all due respect, I wouldn't be
 10 sitting here, because this Commission wouldn't be
- 11 here considering the case.
- 12 The retrofit of the units with SCR; the
- 13 preferential dispatch of those units that have the
- 14 best controls to use oil. It would be all
- 15 mitigation measures that I would recommend to, for
- 16 example, the Air District if they were considering
- some kind of a proceeding that required them to
- 18 look at this issue.
- 19 HEARING OFFICER GEFTER: Have you
- 20 already recommended those mitigation measures to
- 21 the Air District?
- MR. RUBENSTEIN: The retrofit of the
- 23 units with SCR I've already recommended to my
- clients, and they're proceeding with those.
- 25 COMMISSIONER PERNELL: The assumptions

Т	that you've given us was based on existing
2	conditions, in other words Otay Mesa wasn't
3	factored into any of these charts?
4	MR. RUBENSTEIN: My charts were all
5	hypothetical charts of different curtailment
6	scenarios because I'm not qualified to tell you
7	whether a curtailment is going to occur or not.
8	COMMISSIONER PERNELL: All right, then
9	in your hypothetical was Otay Mesa included?
10	MR. RUBENSTEIN: I did not need to
11	decide whether Otay Mesa was included or not. If
12	there was a curtailment for any reason of the
13	magnitudes I estimated those would be the
14	emissions impacts.
15	If a curtailment of one day, for
16	example, occurred, one additional day occurred due
17	to Otay Mesa, and that was at the 10 percent
18	curtailment level, then my estimate is that there
19	would be an extra ten tons of emissions on that
20	one day.
21	COMMISSIONER PERNELL: Right, so it
22	sounds like it wasn't predicated on whether Otay
23	Mesa exists or not, just on curtailment?

MR. RUBENSTEIN: My testimony is based

on that, right. It's for the Commission to decide

24

1	whether	Otav	Mesa,	based	on	other	testimony	you've

- 2 heard, whether Otay Mesa could cause that kind of
- 3 a curtailment. I can't reach that conclusion --
- 4 COMMISSIONER PERNELL: And then it went
- 5 out to '03?
- 6 MR. RUBENSTEIN: I looked, for purposes
- of my analysis I looked at what the emissions
- 8 impacts would be in 2003, because that's the first
- 9 year that there could be any interaction between
- 10 Otay Mesa and the Encina and South Bay plants.
- 11 COMMISSIONER PERNELL: And then just a
- 12 final question that I didn't hear. Maybe I
- shouldn't ask this, but there wasn't any analysis
- on whether there would be any additional supply of
- natural gas between now and '03?
- MR. RUBENSTEIN: No, because again I'm
- 17 not competent to answer the question about whether
- 18 there will be any additional gas supplies, or how
- 19 specifically they might affect gas availability to
- 20 Encina and South Bay. That was in the testimony
- of Mr. Weatherwax.
- 22 COMMISSIONER PERNELL: Thank you.
- MR. VARANINI: We have some rebuttal
- 24 testimony from Mr. Rubenstein to Mr. Caldwell, and
- I don't know when that's appropriate to take that

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1 up. Whether the applicant's going to call Mr.
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- 2 Caldwell or not.
- 3 And then secondly, should we have a
- 4 response now, or wait until Mr. Caldwell's
- 5 testimony has gone on.
- 6 HEARING OFFICER GEFTER: Is the
- 7 applicant planning to call Mr. Caldwell, yes?
- 8 Okay, after Mr. Caldwell is called, then perhaps
- 9 you can ask Mr. Rubenstein to come back in
- 10 rebuttal.
- 11 MR. VARANINI: Thank you.
- 12 HEARING OFFICER GEFTER: At this point,
- does staff have cross-examination of Mr.
- 14 Rubenstein?
- MR. OGATA: Yes, we just have a couple
- of questions.
- 17 CROSS-EXAMINATION
- 18 BY MR. OGATA:
- 19 Q Mr. Rubenstein, with respect to the
- 20 emissions last week from Cabrillo and Encina, or
- 21 South Bay, were those emissions -- are those
- 22 emissions already covered by existing permits?
- 23 A Yes, all of the emissions that occurred
- last week were within applicable permits.
- 25 Q As I understand your testimony, you said

1 that those emissions were equivalent to your 10

- percent curtailment scenario, is that right?
- 3 A That's correct.
- 4 Q And do you know if those emissions
- 5 caused any air quality violations?
- 6 A I do not.
- 7 MR. OGATA: Thank you, that's all the
- 8 questions I have.
- 9 HEARING OFFICER GEFTER: Applicant.
- MR. CARROLL: Thank you.
- 11 CROSS-EXAMINATION
- 12 BY MR. CARROLL:
- 13 Q Mr. Rubenstein, thank you for that very
- 14 complete explanation of your testimony on the air
- 15 quality findings that you reached. Actually
- 16 answered many of the questions that I had
- 17 regarding the foundation for your assumptions.
- 18 But I do have some remaining questions.
- 19 And point of clarification, I think you testified
- 20 a couple of times, including just near the end of
- 21 your comments, that you were not qualified to make
- 22 any predictions about whether or not there would
- 23 be additional curtailments and what the extent of
- those might be.
- 25 And I just wanted to clarify because

there was a statement on page 3 of your written

- 2 testimony which states that, it's the first
- 3 paragraph under the heading of summary, that the
- 4 potential for future gas curtailments at the
- 5 Encina and South Bay power plants are a real
- 6 possibility.
- 7 So, to me that statement seems somewhat
- 8 contradictory to a number of statements you made
- 9 in your verbal testimony.
- I wanted to clarify. Are you making any
- 11 predictions regarding the likelihood or the
- 12 magnitude of future curtailments?
- 13 A I believe that would be accurately
- 14 characterized as a lay conclusion. I looked at
- what happened last week, and without having any
- 16 expertise in this area, concluded that the events
- 17 could repeat itself.
- 18 That's the extent of my conclusion.
- 19 Q Okay. And similarly, the 10 percent, 20
- 20 percent, 50 percent and 100 percent scenarios are
- 21 simply scenarios that you chose for purposes of
- 22 analysis and don't have any relationship to actual
- 23 quantitative analysis that would lead one to
- 24 conclude that those are reasonable scenarios,
- likely scenarios, possible scenarios?

1 A Well, actually based on my discussions

- with the plant staff of what happened last week
- for, I believe, at least the South Bay plant,
- 4 there was a 100 percent curtailment for, I
- 5 believe, 20 hours.
- 6 So I think that the events of last week
- 7 indicate that the entire range that I looked at
- 8 is, in fact, possible. But it does not indicate
- 9 the extent to which that may happen in the future.
- 10 Q Those curtailments obviously occurred
- 11 under a very different set of circumstances than
- 12 would exist with the Otay Mesa power plant on
- line, would you agree?
- 14 MR. VARANINI: I'd object that that
- calls for a -- it's a speculative question.
- 16 HEARING OFFICER GEFTER: Yeah, objection
- 17 sustained.
- 18 BY MR. CARROLL:
- 19 Q In your direct written testimony, I
- 20 think you answered this question but let me
- 21 clarify. With respect to the scenarios that you
- 22 assumed, you assumed that those would occur over a
- 23 24 hour period of time?
- 24 A That's correct.
- Q Okay. There is a statement in your

1 written testimony, you alluded to it as well in

- 2 your verbal testimony. It's in the second
- 3 paragraph under summary.
- Where it states, in essence, that you
- 5 assumed the planned retrofits at the Encina and
- 6 South Bay facilities. Am I correct that that's --
- 7 A That's correct.
- 9 page 8 of your written testimony and the
- 10 footnotes, and specifically at footnote 17, which
- is the reference to the NOx emissions that you
- 12 assumed would occur, as I understand it you based
- 13 your NOx calculations on the applicable or at
- least the most recently proposed limits in rule
- 15 69, is that correct?
- 16 A Yeah, and emphasis on the word proposed,
- 17 the most recent proposal by the District Staff for
- amendments to rule 69.
- 19 Q So in fact your calculations didn't
- 20 assume emissions, actual emissions with the
- 21 installation of controls, they assumed maximum
- 22 allowable emissions under the rule?
- 23 A I think the answer is partially yes,
- 24 partially no, if I could explain. We did assume
- full SCR retrofits and emission limits of .15

1 pounds per megawatt hour for five of the nine

- 2 units at the two facilities.
- 3 And based on my understanding of the
- 4 design of the SCR control systems of those
- facilities, the actual emissions will be within
- 6 roughly 10 percent of those limits.
- 7 With respect to the other units that
- 8 will not have full SCR installations, my estimates
- 9 are based on the District's limits which in turn
- 10 are based on the District's estimates of what
- 11 emission levels can be achieved.
- 12 Consequently I don't expect those limits
- would be substantially higher than actual
- 14 emissions, either. Probably again about 10
- percent, just as for the Otay Mesa plant.
- 16 Emissions will be below on a consistent basis, but
- not exactly up to the permit limits.
- 18 So my judgment is that for NOx emissions
- in particular, my estimates are probably within 10
- to 15 percent.
- 21 Q Okay, so your testimony now is that
- these aren't really the emissions that would
- 23 result assuming installation of all the controls,
- but they're pretty close in your opinion, is
- 25 that --

1 A With respect to NOx.

- 2 MR. VARANINI: I want to object, he's
- 3 mischaracterizing the testimony. And I think the
- 4 implications are not consistent with what, in
- fact, he testified to and what, in fact, he wrote.
- 6 MR. CARROLL: There's a direct
- 7 contradiction within the written testimony between
- 8 how the emissions were calculated. I'm just
- 9 trying to clarify what the correct answer is.
- 10 HEARING OFFICER GEFTER: Ask that
- 11 question that way. See if he has an answer for
- 12 you.
- 13 BY MR. CARROLL:
- 14 Q Am I correct that your testimony is that
- 15 the emissions were calculated consistent with
- 16 footnote 17 as opposed to the statement on page 3?
- 17 A I guess I don't see the inconsistency
- 18 between the two. I did assume that all currently
- 19 planned retrofits of emission controls proceeded
- 20 on schedule. And the specific numbers that I used
- are outlined in footnote 17.
- Q Okay, but the emission calculations are
- 23 based on the maximum allowable under the rule as
- 24 opposed to what you would anticipate the emissions
- to be assuming installation of the controls?

1 A I don't see that as an inconsistency.

- 2 They were based on the expected --
- 3 Q Well, is it just a true statement?
- 4 MR. VARANINI: I object, asked and
- 5 answered. It seems to me what the answer was was
- 6 that for regulatory purposes they used one number
- 7 consistently. And then for purposes of what may
- 8 happen on the ground, you would expect that that
- 9 worst case regulatory number would be, from time
- 10 to time, less -- around a 10 percent minus value.
- 11 That's what I heard.
- 12 HEARING OFFICER GEFTER: Okay, well, it
- seems to me that both counsel can argue the point
- in their briefs. Let's move on, Mr. Carroll.
- MR. CARROLL: Thank you.
- MR. RUBENSTEIN: And I'd point out that
- 17 that footnote only refers to NOx emissions.
- 18 BY MR. CARROLL:
- 19 Q On page 4 of your written testimony,
- it's the last paragraph, larger paragraph on the
- 21 page. The second sentence refers to -- it states:
- 22 In my recent experience the Commission has
- 23 required mitigation for a variety of foreseeable,
- 24 significant, short-term impacts, and then it goes
- 25 on.

1 What did you mean by short term in this

- 2 context?
- 3 A The specific example that I gave during
- 4 my oral testimony today was the construction of
- 5 the Moss Landing Power Plant which was an impact
- 6 that's expected to last not more than 30 months.
- 7 Q Are you familiar with the prehearing
- 8 conference statement that was filed by Cabrillo in
- 9 this matter?
- 10 A Yes, I am.
- 11 Q Do you have a copy of that with you?
- 12 A I do if you can give me a minute to get
- it in front of me.
- 14 (Pause.)
- MR. RUBENSTEIN: I have it in front of
- me now.
- 17 BY MR. CARROLL:
- 18 Q Thank you. Are you also familiar with
- 19 appendix B to one of the final staff assessment
- 20 that was prepared by Mr. Layton from the CEC
- 21 Staff?
- 22 A I believe I am, but I keep having
- 23 trouble finding that appendix. I find it and I
- lose it. That is in -- oh, it's in volume one?
- Q Part one, that's correct.

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1 A Yes, I have that in front of me.
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- 2 Q Thank you. In Cabrillo's prehearing
- 3 conference statement there are a number of places
- 4 where the distinctions between fuel oil and
- 5 residual oil are drawn.
- 6 For example, page three under the
- 7 heading overview, the second paragraph includes
- 8 some discussion of this issue. Could you please
- 9 explain for me the difference between fuel oil and
- 10 residual oil?
- 11 A Fuel oil is a generic term that I
- 12 believe includes items such as number six fuel
- oil, number two fuel oil, residual fuel oil, and
- 14 potentially bunker fuel.
- 15 Q Thank you. What sulfur content fuel did
- 16 you use to generate the numbers contained in the
- tables in your written testimony?
- I can help you, it's footnote 14. Do
- 19 you recall using .5 percent sulfur as the sulfur
- 20 content of the fuel in your analysis?
- 21 A Yes, I do.
- 22 Q And do you know what sulfur content Mr.
- 23 Layton used in his analysis contained in appendix
- 24 B?
- 25 A I believe Mr. Layton used .5 percent

- 1 sulfur as well.
- Q Okay, so Mr. Layton's analysis and your
- 3 analysis are consistent in that respect?
- $A ext{ Yes.}$
- 5 Q Can you tell me if you know what the
- 6 sulfur content of fuel oil typically available in
- 7 southern California is?
- 8 A Actually I asked that question yesterday
- 9 of the purchasing manager for the South Bay Power
- 10 Plant, who has found himself in the position of
- 11 suddenly having to buy fuel oil that he didn't
- 12 expect to have to buy.
- 13 He indicated that he was having some
- 14 amount of difficulty locating fuel with a sulfur
- 15 content of anything less than .5 percent. And he
- indicated specifically that he had no sources who
- 17 indicated an ability to provide anything as low as
- 18 .25 percent.
- 19 Q Did you consider in your analysis the
- 20 burning of any cleaner fuels than those with .5
- 21 percent sulfur content?
- 22 A It's not my understanding that there are
- 23 any number six fuel oils available with a sulfur
- content significantly below .5 percent.
- The actual sulfur content of the fuels

1 currently in the tanks at Encina and South Bay, as

- 2 reported to me by the plant staff of the two
- 3 plants is between .4 and .5 percent.
- 4 And with respect to the burning of a
- 5 distillate fuel, which would be, in theory, the
- 6 next most logical fuel to burn, I confirmed that
- 7 major modifications of both the fuel handling
- 8 system and the burners at each of the two plants
- 9 would be required in order to burn distillate fuel
- 10 and potentially permit applications for
- 11 modifications to burn distillate fuel would have
- to be submitted to the Air District.
- So, because of that I did not consider
- the possibility that other cleaner burning fuels
- would be combusted in my analysis.
- 16 Q Just so I understand your testimony is
- 17 it would not be possible to burn cleaner fuels at
- 18 Encina and South Bay plants as a backup fuel.
- 19 A It would not be possible without
- 20 substantial investments and substantial time.
- 21 MR. CARROLL: Excuse me just a moment.
- 22 There were a number of questions that I had for
- 23 you that have been answered by the District and I
- 24 don't want to waste time repeating, if you'll just
- 25 bear with me for a moment.

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1 (Pause.)
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- 2 BY MR. CARROLL:
- 3 Q I'd like to draw your attention to
- 4 what's been marked as exhibit 89, which is the
- 5 emergency motion of Dynegy Marketing and Trading
- for immediate modification and clarification of
- 7 SDG&E's gas rule 14.
- 8 Do you have a copy of that document, do
- 9 you know?
- 10 A I believe I do. Yes, I have that in
- 11 front of me now.
- 12 Q You are, I take it, familiar with the
- 13 permits applicable to the units at the Encina and
- 14 South Bay facilities?
- 15 A Yes, I am.
- 16 Q Turning to page 12 of exhibit 89, under
- the heading, the need for immediate action, the
- 18 second paragraph, first sentences reads: As
- 19 discussed in footnote 5 under rules and
- 20 interpretations of San Diego Air Pollution Control
- 21 District, Dynegy would not have the option of
- 22 burning oil at the San Diego plants after December
- 23 31 of this year.
- In your opinion, is that a true
- 25 statement?

- on a blank sheet of paper, I would say no. But,
- 3 two sentences down in the same paragraph it
- 4 states: Had this week's curtailment occurred on
- or after January 1, 2001, both Dynegy and Dena
- 6 would have had no choice but to shut down those
- 7 generating units because of their inability to
- 8 burn oil without a force majeure exemption from
- 9 the emissions allowance cap.
- 10 I would actually modify that second
- 11 sentence to indicate without a force majeure
- 12 exemption from the permit condition.
- 13 But in any event I believe that sentence
- 14 clarifies the meaning of the first sentence, and I
- believe the paragraph as a whole is correct.
- 16 Q Let me make sure I understand your
- 17 answer. So the first sentence is true, post
- 18 January 1, 2001?
- 19 A No, that's not what I said. I said that
- 20 the first sentence, when read in the context of
- 21 the third sentence, indicates that the paragraph,
- as a whole, is correct.
- 23 But if I were to take the first sentence
- out of context I would not agree with it.
- 25 HEARING OFFICER GEFTER: Mr. Carroll,

1 the District testified earlier as to when Duke and

- 2 Encina were allowed to burn fuel oil. And it's
- 3 the Committee's understanding at this point, and
- 4 the District can let us know if this is accurate,
- 5 that after January 1, 2001, both projects cannot
- 6 burn fuel oil except in the case of a force
- 7 majeure event.
- MR. MOORE: That's correct.
- 9 HEARING OFFICER GEFTER: Thank you.
- 10 MR. MOORE: With some allowance for
- 11 testing.
- MR. CARROLL: I appreciate that. It's
- just been a point of some confusion and I wanted
- 14 to attempt to clarify it through the witnesses for
- 15 the intervenors.
- 16 PRESIDING MEMBER LAURIE: We appreciate
- 17 that.
- 18 BY MR. CARROLL:
- 19 Q Are you familiar with the variances from
- 20 rule 69 issued to Encina and South Bay facilities
- on October 14th of 1999 and November 16th of 2000,
- 22 respectively?
- 23 A Yes, actually the final variance for the
- 24 Encina plant was issued or reissued, if you will,
- in February of 2000. But, yes, I'm familiar with

- 1 those.
- 2 Q And what was your role with respect to
- 3 those variances? Are you familiar as an outside
- 4 observer or were you involved in those variances
- 5 in some way?
- 6 A In the case of the Encina variance
- 7 proceeding, the variance petition was prepared
- 8 under my supervision in consulting with the client
- 9 and their attorneys. I participated in presenting
- the case before the Hearing Board.
- In the case of the South Bay variance
- 12 proceeding, I was a reviewer and a participant of
- the process.
- 14 Q There's been a package marked as exhibit
- 15 86 which includes a number of documents related to
- 16 the variance for Duke Energy South Bay. Do you
- 17 have a copy of that?
- 18 A Are those the materials that were
- 19 attached to the testimony of Mr. Caldwell?
- Q Yes, they are.
- 21 A Yes, I believe I do.
- 22 Q Thank you. If you could turn to page 4
- of the petition for variance, which is the second
- document, and there's a cover letter from the
- 25 District Staff; the second document is the

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1 petition for variance.
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- 2 A Mr. Carroll, I'm sorry, the copy I have 3 of Mr. Caldwell's testimony is now missing 4 unfortunately. Do you have an extra copy handy?
- 5 Q I do.
- 6 MS. LUCKHARDT: I'd like to object to
 7 this line of questioning. I'd like to know what
 8 the relevance of the --
- 9 HEARING OFFICER GEFTER: Microphone,
 10 please.
- MS. LUCKHARDT: I guess I'd like to

 object to the relevance of this application, to

 this line of questioning. I believe we have a

 final determination on the variance that will be

 issued shortly by the Air District, and the

 application is no longer the most current and

 valuable document to use.
- 18 MR. CARROLL: Let me say first I have 19 only a couple of questions which I don't think 20 will take very long to answer. I also think that 21 it's relevant because the witness has testified in 22 great detail about the potential for emissions 23 from this facility as a result of natural gas curtailments. And there is similar discussion 24 25 regarding anticipated emissions from this facility

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1 in this document.
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- 2 And I'm trying to understand the
- 3 relationship between the data that's been provided
- 4 today and the data that was provided last week.
- 5 MS. LUCKHARDT: I guess I'll see what
- 6 you ask about, but I'd still think that that
- 7 document is not the most current and best version
- 8 of the ultimate Air District finding. And I
- 9 understand what you're trying to do.
- MR. CARROLL: You can clarify, but I
- don't believe what I'm going to ask about would
- 12 have changed --
- 13 HEARING OFFICER GEFTER: All right, just
- go ahead and ask the question.
- 15 BY MR. CARROLL:
- 16 Q Mr. Rubenstein, on page 4 of the
- 17 variance petition which I've just provided you a
- 18 copy of, there are some calculations near the top
- of that page regarding the anticipated emissions
- 20 during the period of the variance.
- 21 Were you involved in preparing those
- 22 emissions estimates?
- 23 A Actually, no, I was not. Someone from
- Duke Energy North America prepared those.
- 25 Q Are you familiar with how they arrived

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- 1 at those estimates?
- 2 A In very general terms, yes.
- 3 Q The estimates are that peak day NOx
- 4 emissions from unit four, which was the subject of
- 5 the variance, would be 2.21 tons per day -- I'm
- 6 sorry, 2.21 tons over the period of the variance,
- 7 and that the total emissions would be 171.5 tons
- 8 during the period of the variance.
- 9 Do you knwo what level of curtailment
- 10 was assumed in arriving at, or potential
- 11 curtailment was assumed in arriving at those
- 12 estimated emissions?
- 13 A You're referring to curtailment of
- 14 natural gas supplies?
- 15 O Yes.
- 16 A I don't believe that any oil firing was
- 17 assumed in calculating those excess emissions.
- 18 Q Okay, thank you. Let me ask you one
- more question, Mr. Rubenstein, perhaps one or two
- 20 more.
- 21 You testified earlier that you thought
- it would be impossible, or at a minimum very
- 23 difficult for the Encina and South Bay units to
- 24 burn cleaner fuels at this time.
- 25 Is that true after the retrofits are in

- 1 place, as well?
- 2 A Yes, the concerns that I have about
- 3 changing to a distillate fuel are true whether the
- 4 retrofits occur or not, because they relate to the
- 5 fuel supply system, fuel storage tanks and the
- 6 burners, none of which are affected by the SCR
- 7 retrofits.
- 8 Q And I do have just a couple more
- 9 questions on your tables with your written
- 10 testimony.
- 11 A Yes.
- 12 Q And specifically the table that's headed
- 13 San Diego gas curtailment analysis.
- 14 A I have that in front of me. That would
- be the table on page 13? Small number at the
- 16 bottom.
- 17 Q I'm afraid we may have written over the
- 18 page numbers, but it says San Diego gas
- 19 curtailment analysis at the top. We have a lot of
- 20 notes on our version.
- 21 (Laughter.)
- MR. RUBENSTEIN: I've got -- the only
- reason I ask that is there are two tables. One is
- 24 my assumptions table, and the other is a summary
- 25 table that has as a second line, daily emissions.

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1 BY MR. CARROLL:
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- 2 Q It's the assumptions table. It is
- 3 table --
- 4 A I'm afraid I didn't number my tables,
- 5 but if it's --
- Q It's on page 7.
- 7 A Thank you.
- 8 Q Dropping down to the emission rates, and
- 9 then dropping down to the SOx line, under gas
- 10 fuel, and then reading over to the column for Otay
- 11 Mesa, I see a .018 figure.
- 12 If I read backwards across the other
- 13 rows for the various Encina and South Bay units,
- the figure is considerably lower, .007, .006.
- That confuses me to some extent because
- 16 presumably they're burning the same natural gas
- and the Otay Mesa project is considerably more
- 18 efficient. So I'm wondering why the SOx emission
- 19 rates for the Otay Mesa would be more than twice
- as high as the rates that you've assumed for the
- 21 Encina and South Bay?
- 22 A Well, Mr. Carroll, I will I guess
- 23 explain the Otay Mesa application, but the reason
- is that the sulfur content that was assumed in the
- 25 application prepared by Otay Mesa was much higher

than the actual sulfur content experienced in San

- 2 Diego area, and much higher than the default
- 3 national emission factor, which is reflected in
- 4 the numbers that I've used.
- I agree that it's the same fuel, and for
- 6 reasons that I'm not sure I understand, your
- 7 application was prepared using a much higher
- 8 sulfur number than I've used in other applications
- 9 for that -- much higher than the default emission
- 10 factor that's used, for example, in the acid rain
- 11 program.
- 12 Q Okay. And then one more question
- relating to your tables, and this would include
- all of the various scenarios, the 10, 20, 50 and
- 15 100. And Commissioner Pernell addressed some of
- 16 these questions, but I want to make sure that we
- 17 understand.
- 18 None of these scenarios assume Otay Mesa
- 19 Generation Project in operation?
- 20 A Each of these scenarios could occur with
- or without Otay Mesa, and I made no judgments
- 22 about the relative frequency with which they might
- occur, with or without Otay Mesa.
- 24 Q But if Otay Mesa were included in your
- scenario, given its higher efficiency, then

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obviously some of the load that's represented by
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- 2 the Encina and South Bay projects here would be
- met by Otay Mesa, and the emissions, in aggregate,
- 4 would be lower and would certainly be lower at the
- 5 Encina and South Bay projects, is that not
- 6 correct?
- 7 A Actually that gets to another question
- 8 of transmission congestion that I did not feel
- 9 qualified to deal with, which is why I did not
- 10 present my analysis in that way.
- 11 You have to make several assumptions in
- order to reach those conclusions and I did not
- feel qualified to make those assumptions.
- 14 Q Well, I'm not asking you to make any
- assumptions about at what level the various plants
- 16 might be dispatched, but as a general matter, if
- 17 Otay Mesa were in the system obviously Encina and
- 18 South Bay in each of these scenarios would be
- 19 operating at some --
- 20 MR. VARANINI: I object, it
- 21 mischaracterizes the witness' testimony. What
- 22 he's saying essentially is --
- 23 HEARING OFFICER GEFTER: That's okay,
- your objection is sustained.
- 25 MR. VARANINI: Okay. I can't give a

1	speech?
2	HEARING OFFICER GEFTER: No.
3	(Laughter.)
4	HEARING OFFICER GEFTER: Save it.
5	MR. VARANINI: Darn.
6	HEARING OFFICER GEFTER: Mr. Carroll,
7	how many more questions do you have?
8	MR. CARROLL: We're complete at this
9	time, thank you.
10	HEARING OFFICER GEFTER: Thank you.
11	MS. LUCKHARDT: I have just a few
12	questions.
13	CROSS-EXAMINATION
14	BY MS. LUCKHARDT:
15	Q In your initial comments, Mr.
16	Rubenstein, you talked about a partial SCR
17	retrofit on unit four. Is the retrofits planned
18	for unit four sufficient to meet the air quality
19	requirements for that unit?
20	A If the SCR retrofit planned for uni-
21	four is sufficient in conjunction with some other
22	modifications to the boiler to meet the unit
23	specific limit in rule 69.
24	If rule 69 is amended those other

25 modifications might not occur, but the SCR

- installation will still occur nonetheless.
- Q Okay, so in any event, is it your
- 3 testimony that South Bay intends to comply?
- 4 A Yes, they will either comply with the
- 5 rule on the books, or they will comply with the
- 6 amended rule.
- 7 Q And, Mr. Rubenstein, you also talked
- 8 about, or were asked questions about the cap. Can
- 9 you explain what happens to the cap when fuel oil
- is burned under a force majeure situation?
- 11 A No. I will do my best. The reason why
- 12 I say no is because there is no small amount of
- uncertainty on that issue at the moment.
- 14 First of all, let me make clear that as
- of January 1, 2001, the only place where any
- 16 emission caps exist is in the two variance orders,
- the one already issued for the Encina plant, and
- the one expected to be issued for the South Bay
- 19 plant.
- 20 As of January 1, 2001 there are no
- 21 emission caps contained in the permits for the
- 22 individual units, and there are no emission caps
- 23 contained in rule 69.
- 24 HEARING OFFICER GEFTER: Can I interrupt
- 25 your testimony --

1	MR. RUBENSTEIN: Sure.
2	HEARING OFFICER GEFTER: and ask the
3	Air District whether that is an accurate
4	description, and also if the Air District intends
5	to impose permit caps on the entire project?
6	MR. MOORE: That is a correct
7	description of the situation that will exist. And
8	right now we are not intending to impose
9	additional caps, although as there has been some
10	discussion of amending rule 69, we have not made
11	any decision to do that yet. If that occurs it's
12	possible a cap will be imposed it's probable, I
13	would say, a cap would be imposed pursuant to
14	that.
15	HEARING OFFICER GEFTER: Again, I'm
16	going to interrupt, Mr. Rubenstein, because this
17	is on point.
18	Mr. Rubenstein has indicated a series of
19	calculations where there are tremendous emissions
20	resulting from the burning of fuel oil which are
21	not capped by the Air District.
22	Are you aware of this information? Is
23	this part of your rule 69 amendment proceeding?

MR. MOORE: We would certainly look at

that during the amendment process for rule 69. We

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1 have not looked at it in any detail right now.
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- 2 HEARING OFFICER GEFTER: This amendment
- 3 process is ongoing?
- 4 MR. MOORE: We have not officially
- 5 decided to amend rule 69. We have been approached
- 6 by both the facilities to amend it. We've been
- 7 gathering information. But we have not decided to
- 8 go ahead to amend the rule or not.
- 9 Right now the rule -- the existing rule
- would be the rule that I would consider to apply.
- 11 HEARING OFFICER GEFTER: Okay. Ms.
- 12 Luckhardt.
- MS. LUCKHARDT: Okay, I wasn't sure
- 14 whether you were complete.
- BY MS. LUCKHARDT:
- 16 Q Mr. Rubenstein, you were asked some
- 17 questions about your analysis. Would you consider
- 18 your analysis to be typical -- let me start again.
- 19 When you do an analysis for the Energy
- 20 Commission do you usually analyze the worst case
- 21 as one of your -- as what you analyze?
- 22 A Yes, worst case in the context of the
- 23 question I try to answer.
- Q Okay, so when you looked at the amount
- of pounds per hour emitted, were you using what

1 would be considered the worst case numbers?

- 2 In the case of all pollutants except 3 oxides of nitrogen the emission estimates that I included were my best estimates. They are neither
- optimistic nor pessimistic.
- In the case of oxides of nitrogen
- because that pollutant is going to be very tightly
- R controlled on most of the units, I used the
- applicable emission limits because I believe those 9
- will be, in fact, very close to what the emissions 10
- 11 will be.

- 12 And since all of these retrofits are
- 13 occurring in the future, I can't predict with any
- 14 certainty just how far below the permitted level
- 15 they will be. And as I indicated earlier, my
- 16 judgment is that the actual emissions of NOx will
- 17 be probably within about 10 percent of the
- permitted levels. And certainly below the 18
- 19 permitted levels.
- 20 And then Mr. Carroll referring you to
- 21 the variance application. Can you please give us
- 22 an understanding of what that time period that
- variance application covers? 23
- 24 HEARING OFFICER GEFTER: Is that with
- 25 respect to Encina or to --

1 MS. LUCKHARDT: With respect to South

- 2 Bay.
- 3 HEARING OFFICER GEFTER: -- with respect
- 4 to Duke? To South Bay.
- 5 MR. RUBENSTEIN: I believe you're
- 6 referring to the document that was handed to me as
- 7 page 4 of the variance petition.
- 8 And the excess emissions calculation
- 9 covered a period of nine months through the end of
- 10 September 2001.
- 11 BY MS. LUCKHARDT:
- 12 Q And are you aware of whether -- or can
- 13 you please explain what the mitigation that was
- 14 required for South Bay for this variance? Can you
- describe that mitigation?
- 16 A The mitigation that was required for
- 17 South Bay as a condition of obtaining the
- 18 variance, -- I'm doing this from memory since I
- 19 don't have my variance file with me -- included a
- 20 requirement to operate the emission controlled
- 21 units preferentially to minimize NOx emission
- during the course of the year.
- 23 A limitation on the annual NOx emissions
- 24 from the facility, which again goes beyond
- 25 anything in current rules to, I believe it was 359

And in addition, the payment of an

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1
        tons per year.
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19

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- 3 excess emissions fee, similar in concept to the 4 mitigation fee that's been discussed here today, 5 but calculated in a different manner, and 6 obviously for a different purpose. But that's the third element of the mitigation requirement, was 8 payment of a mitigation fee for all excess NOx emissions during the course of the year. 9 10 0 And can you compare the amount of mitigation fees between the two projects? 11 12 Α Yes. 13 Are they relatively equivalent or --14 No. The mitigation fee that was 15 assessed on the South Bay facility by the San 16 Diego District Hearing Board was an amount of 17 \$1600 per ton for each ton of excess emissions during the variance period.
 - By comparison the agreement that we heard this morning of a payment of \$1.2 million as a mitigation fee for 171 tons of emissions being emitted each year for 30 years is equivalent to \$233 per ton.
- So it's \$233 per ton under the agreement 24 25 presented today for Otay Mesa; \$1600 per ton under

the requirement imposed by the Hearing Board on

- 2 the South Bay facility last week.
- 3 Q Thank you.
- 4 MS. LUCKHARDT: I have nothing further.
- 5 HEARING OFFICER GEFTER: Ms. Duncan, do
- 6 you have cross-examination of the witness?
- 7 MS. DUNCAN: No.
- 8 HEARING OFFICER GEFTER: Mr. Claycomb?
- 9 MR. CLAYCOMB: No, ma'am.
- 10 HEARING OFFICER GEFTER: Staff, do you
- 11 have any questions? All right.
- 12 Mr. Varanini, do you have redirect of
- 13 your witness?
- 14 MR. VARANINI: Yes, I do. I was really
- 15 startled and stimulated by Commissioner Pernell's
- question, and I think that I'd like the witness to
- 17 also do just a little bit of thinking about it,
- 18 because it seems to me that those types of
- 19 questions can be answered by certain modeling or
- 20 analytical exercises.
- 21 REDIRECT EXAMINATION
- 22 BY MR. VARANINI:
- 23 Q Mr. Rubenstein, have you --
- MR. CARROLL: Excuse me, is counsel now
- 25 testifying in response to the question of

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1 Commissioner Pernell, or --
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- 2 MR. VARANINI: I just gave a speech.
- 3 MR. CARROLL: I object to this leading
- 4 of the witness to go onto the record and make a
- 5 speech about what he wants the witness to say, and
- 6 then turn to the witness and ask a question.
- 7 PRESIDING MEMBER LAURIE: That's fine,
- 8 Mr. Carroll. Thank you.
- 9 HEARING OFFICER GEFTER: Okay.
- 10 BY MR. VARANINI:
- 11 Q Mr. Rubenstein, have you participated in
- 12 joint analytical exercises with electric system
- 13 modelers to determine likely outcomes of different
- 14 plant additions or deletions from the electrical
- 15 system?
- 16 A Yes, I have, on many occasions.
- 17 Q And does the Commission use that from
- 18 time to time to delve into the no-project
- 19 alternative?
- 20 A Yes, I'm aware that the Commission has
- 21 used those types of analyses in the past.
- 22 Q And are you and Mr. Weatherwax prepared
- 23 to answer Commissioner Pernell's question?
- 24 A Yes, I can provide the emissions related
- assumptions to meld with Mr. Weatherwax's system

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1 modeling analysis to specifically answer that
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- 2 question.
- 3 Q And would that analytical exercise be
- 4 more focused if he were to make discrete cost
- 5 production model runs to give to you to make an
- 6 air analysis?
- 7 A Yes, it would.
- 8 MR. VARANINI: I have no further
- 9 questions.
- 10 HEARING OFFICER GEFTER: Mr. Varanini,
- do you want to move exhibit 82 into the record?
- MR. VARANINI: Yes, I do.
- 13 HEARING OFFICER GEFTER: Are there any
- objections to exhibit 82, which is Mr.
- Rubenstein's written testimony?
- 16 Hearing no objections exhibit 82 is
- 17 received into the record.
- Does Cabrillo have any other witnesses
- on the topic of air quality?
- MR. VARANINI: No, we don't, but we will
- 21 file an offer of proof with the Committee to lay
- 22 out an objective analytical program and a timeline
- 23 to answer both Commissioner Laurie's XY and Z
- analog, and Commissioner's Pernell's discrete
- 25 question on what may happen, rather than ranges of

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1 concerns about what might happen.
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- 2 HEARING OFFICER GEFTER: Thank you.
- 3 Question for the Air District before we move on.
- I'm very glad that you've stayed with us today.
- 5 With respect to the testimony that you
- 6 heard from Mr. Rubenstein and the potential for
- 7 air quality impacts from the burning of fuel oil
- 8 at the Encina and South Bay plants, do you have
- 9 any additional information or advice, as the Air
- 10 District, for the Committee on this subject?
- MR. MOORE: Well, I guess to start off I
- 12 would say that we do think that the project is a
- good project, Otay Mesa is a good project. We're
- very interested in seeing newer, cleaner, more
- 15 efficient electric generating facilities built,
- 16 especially ones that are going to demonstrate
- 17 technology such as Otay Mesa.
- 18 But we are very concerned about gas
- 19 curtailment problems in the area.
- In our view the way to correct that is
- 21 to increase the supply of gas. And I would, I
- 22 guess, respectfully urge the Commission to support
- our efforts before the Public Utilities
- 24 Commission, both to revise the way curtailments
- 25 are done, and also to investigate why there is not

l a sufficient supply of gas in San Die	ego County.
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- 2 Emergency letters requesting emergency
- 3 relief from the current curtailment scheme have
- 4 been filed by both Duke and Cabrillo just
- 5 recently; and the District supports those letters.
- In our view the sale of gas to Rosarita
- 7 Beach is the major problem right now, based on the
- 8 evidence we've seen. We may -- we're open to
- 9 seeing additional information, but that we view as
- 10 the main problem.
- 11 And we would urge the Commission to
- 12 support our efforts to require that Rosarita Beach
- 13 be fully curtailed before any of the plants in the
- 14 San Diego area are curtailed.
- 15 HEARING OFFICER GEFTER: Thank you. And
- 16 with respect to the South Bay project, there was
- 17 an indication in that emergency appeal that South
- 18 Bay was intending to decommission the plant and
- 19 build new units. Is that something that the
- 20 District is overlooking, is actually monitoring?
- 21 MR. MOORE: Well, we know that there has
- 22 been talk about that. There has been no -- they
- 23 have not approached us with an application or
- 24 anything like that.
- 25 It's the long-term goal, we believe, of

1 Duke Energy to do that. But as to when exactly we

- don't know. We'd certainly encourage that, both
- from an air pollution point of view, and from an
- 4 efficiency point of view as far as electric
- 5 utility system.
- 6 HEARING OFFICER GEFTER: I'm going to
- 7 ask Ms. Luckhardt if Duke has a statement as to
- 8 their intent to decommission the existing units
- 9 and build new projects -- new units.
- 10 MS. LUCKHARDT: We are required to
- 11 replace the unit by 2009. And we're making every
- 12 effort to see if we can get it done in advance of
- 13 that timeline.
- 14 HEARING OFFICER GEFTER: Is that unit
- four or all the units?
- MS. LUCKHARDT: The entire facility.
- 17 HEARING OFFICER GEFTER: Thank you.
- 18 MS. LUCKHARDT: And at this point it
- 19 wouldn't be any earlier than 2005 or 2006.
- 20 HEARING OFFICER GEFTER: Thank you. All
- 21 right. We're going to take a recess, about five
- 22 minutes. Off the record.
- 23 (Off the record.)
- 24 HEARING OFFICER GEFTER: On the record.
- 25 Before we hear testimony from Holly Duncan on air

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1 quality, the staff wanted to recall the Air

- 2 District witness and ask a few more questions to
- 3 help clarify the record.
- 4 Mr. Ogata.
- 5 MR. OGATA: Thank you, Ms. Gefter.
- 6 DIRECT EXAMINATION
- 7 BY MR. OGATA:
- 8 Q I just wanted to ask Mr. Moore if he
- 9 could give a further explanation about the
- 10 District's jurisdiction over PM10 standards and
- 11 how he perceives it overlaps or doesn't overlap
- 12 with what staff does.
- 13 I knwo he gave an answer previously, but
- I think for the record if we could ask him to be a
- 15 little more detailed about that.
- 16 A Yes. As I said, the District rules and
- 17 regulations are based on both the Federal Clean
- 18 Air Act and the California Clean Air Act, and
- 19 basically we determine compliance with all the
- 20 standards that derive from those Acts.
- 21 In the case of PM10 there's an emission
- limit in the permit that's based on the maximum
- 23 emissions from the unit. And air quality impact
- 24 analysis and modeling was done to determine
- 25 compliance with both the federal and the state

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1 standards in regard to that limit.
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- 2 HEARING OFFICER GEFTER: With respect to
- 3 BACT and the offset requirement, is that with
- 4 respect to the federal and/or state or federal
- 5 standard for --
- 6 MR. MOORE: With respect to the federal,
- 7 the ambient air quality standards, the modeling
- 8 was done. As far as BACT goes, there's a state
- 9 requirement that if it's over 10 pounds a day,
- 10 BACT is imposed. That was imposed. That was
- 11 evaluated.
- 12 Offsets are not required for PM10 by our
- 13 rules and regulations except in certain
- 14 situations. And that situation would be that the
- 15 ambient air quality standard was exceeded. It's
- 16 not exceeded in this case.
- 17 There's certain limited exceedances
- 18 allowed if offsets are provided. But that was not
- 19 the case here, and so PM10 offsets would not be
- 20 required of this project.
- 21 BY MR. OGATA:
- 22 Q And, Mr. Moore, Mr. Rubenstein
- 23 testifying about the fuel burning episodes last
- 24 week, indicated he didn't know whether or not
- 25 there were any air violations as a result of that.

1 Are you aware of any air violations as a

- 2 result --
- 3 A I'm not aware of any air violations that
- 4 resulted from that.
- 5 MR. OGATA: Thank you, that's all I
- 6 have.
- 7 HEARING OFFICER GEFTER: All right,
- 8 we're going to move on and ask Ms. Duncan, do you
- 9 have testimony on air quality.
- 10 We'll get back to you when you get to
- 11 Mr. Caldwell.
- 12 Whereupon,
- 13 HOLLY DUNCAN
- 14 was recalled as a witness herein and having been
- 15 previously duly sworn, was examined and testified
- 16 further as follows:
- 17 DIRECT TESTIMONY
- 18 MS. DUNCAN: Yes, I do. I would direct
- 19 the Committee to please once again look at my
- 20 exhibit J that was submitted that is addressing
- 21 distributed generation.
- 22 HEARING OFFICER GEFTER: And that is in
- which exhibit?
- MS. DUNCAN: That's part of my
- 25 testimony.

1 HEARING OFFICER GEFTER: Right, we had

- 2 it listed in the exhibit list. Okay, go ahead and
- 3 I'll find it and identify it.
- 4 MS. DUNCAN: Okay. So I can keep to my
- 5 five minutes?
- 6 HEARING OFFICER GEFTER: Yes, go ahead.
- 7 MS. DUNCAN: I continue to feel that the
- 8 air quality issues surrounding this project are so
- 9 unsettling it has turned into a multidisciplinary
- 10 approach.
- We're talking lack of natural gas
- 12 availability and how that's going to impact things
- 13 until that issue gets resolved.
- 14 There are apparently transmission
- issues, a brittle system that could be made more
- brittle, if I understand the analyses I've been
- 17 listening to, as a result of this.
- 18 And I think we are closing in on some
- 19 PM10 mitigation, but again issues have been raised
- about is it equitable compared to the issues of
- 21 mitigation for other generators that are in this
- 22 room.
- I believe that all of these issues are
- obviated by going with my program that I have
- 25 suggested of solving any -- if there are any, and

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1 I question that -- energy shortfalls in our area
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- 2 by off-griding and existing industrial and
- 3 business parks.
- 4 And I believe that a lot of the problems
- 5 we're talking about here would be solved by doing
- 6 that proposal. So I request that you respectfully
- 7 at least consider my proposal under alternatives.
- 8 Thank you.
- 9 HEARING OFFICER GEFTER: Thank you. And
- 10 your proposal is contained in exhibit 70, which
- 11 was received into the record last week.
- MS. DUNCAN: Right.
- 13 HEARING OFFICER GEFTER: Thank you. Mr.
- 14 Claycomb, you indicated --
- MR. CLAYCOMB: Nothing.
- 16 HEARING OFFICER GEFTER: -- you had
- 17 nothing on air? All right.
- The applicant wishes to call Mr.
- 19 Caldwell as a rebuttal witness.
- 20 MR. CARROLL: Yes, at this time we call
- 21 James Caldwell.
- 22 HEARING OFFICER GEFTER: Mr. Caldwell,
- 23 would you please be sworn by the reporter.
- 24 //
- 25 //

- JAMES H. CALDWELL, JR.
- 3 was called as a witness herein and after first
- 4 being duly sworn, was examined and testified as
- 5 follows:
- 6 DIRECT EXAMINATION
- 7 BY MR. CARROLL:
- 8 Q Mr. Caldwell, could you please state
- 9 your name for the record.
- 10 A James H. Caldwell, Jr.
- 11 Q And where are you employed?
- 12 A I am a consultant, self employed.
- 13 Q And could you briefly describe for us
- 14 your experience?
- 15 A I've been in the energy business for 35
- 16 years, the first 15 in the oil refinery. I have
- 17 blended number six fuel oil, made number two fuel
- 18 oil, burned a lot of it.
- 19 Operated maybe 50, 60 boilers, burners,
- 20 different kinds of things. Both myself,
- 21 supervised people who operate that, manage people
- 22 who supervise that. I was Operations Manager at
- 23 ARCO's Watson Refinery, which is now BP AMOCO.
- 24 And then since, for the past ten years,
- 25 I've been involved in alternative energies, air

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1 quality analysis specifically relating to power
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- 2 plant construction around the world.
- 3 Q Thank you. Have you had an opportunity
- 4 to review the written testimony of Mr. Rubenstein
- 5 which has been submitted as exhibit 82?
- 6 A Yes, I have.
- 7 Q And could you please, if you would,
- 8 explain to us your reaction to the analysis
- 9 conducted by Mr. Rubenstein?
- 10 A I think, first my reactions to the
- 11 written testimony, since the oral testimony was
- quite a bit different set of subjects, but the
- written testimony I had about three reactions.
- 14 First was that there is an inconsistency
- which came out in terms of the Otay Mesa's sulfur
- 16 emissions rate. And that Mr. Rubenstein's
- 17 characterization that except for the NOx emission
- 18 rates, that they were his best judgment is at
- 19 least contradicted by the footnotes, if nothing
- else.
- 21 The main reaction I guess I had from the
- 22 written testimony was the assumption about the
- 23 amount of generation to which these emission rates
- should be applied to, which, as I calculated it,
- 25 32,700 megawatt hours in a 24-hour period. That's

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about 1330 megawatt hours per hour for 24 hours.
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- I do not believe that that is a
- 3 plausible scenario for the operation of Encina and
- 4 South Bay in the context of an Otay Mesa plant
- 5 that is also operating at the same time.
- ${\tt Q} \qquad {\tt And} \ {\tt is} \ {\tt that} \ {\tt assumption} \ {\tt that} \ {\tt you} \ {\tt question}$
- 7 reflected in each of the scenarios analyzed by Mr.
- 8 Rubenstein?
- 9 A In all of them, yes.
- 10 Q I didn't mean to cut you off, did you
- 11 have any other comments that you wanted to add?
- 12 A Well, so as I was sort of furiously
- trying to take notes about the additional
- 14 testimony, other than what was in the written
- 15 testimony, I guess I'd have to refer to the
- 16 transcript in order to have a quantitative answer
- 17 to some of the numbers, because, you know, it just
- 18 was too fast and furious.
- 19 But as I listened to the assumptions I
- 20 believe what happened is that what was
- 21 characterized as a worst case analysis by the time
- it was over was an implausible analysis.
- 23 In other words, that the series of
- assumptions, as you went one through ten, and you
- know, about what was the SOx emission rates, what

1 was the NOx emission rates, what was the

- 2 generation, what generation was required for
- 3 reliability, what generation was required for Otay
- 4 to run, whether Otay was gas curtailed at the same
- 5 time and therefore couldn't run.
- 6 That there was no cap on the emissions;
- 7 that there was no change in rule 69; that they
- 8 were burning the worst fuel that they possibly
- 9 could under the rules; that they could have the
- 10 maximum emission rates that they possibly could
- 11 under the rules.
- 12 That by the time you get to assumption
- ten, what you have then is a scenario that is no
- longer a worst case analysis, but is an almost
- physical impossibility to hit all of those
- 16 assumptions all at the same time.
- 17 And just based upon a quick read of
- that, again subject to something going into the
- 19 record and quantifying it, my guess is that the
- 20 import that the emissions are overstated by a
- 21 factor of somewhere between five and ten.
- 22 Q There was also some testimony from Mr.
- 23 Rubenstein related to the ability of the Encina
- and South Bay plants to operate on anything other
- 25 than -- let me rephrase that.

There was some testimony regarding the significant difficulties associated with operating Encina or South Bay plants on anything other than number six distillate.

opinion as to the magnitude of those difficulties?

A I believe the testimony was something to the effect that he had talked to the plant

Based on your experience do you have any

operators and they told him the extreme difficulty.

I can say that based upon my experience that that makes absolutely no sense. That, as a matter of fact, he probably does burn distillate oil at times on those burners with those tanks, that it is common practice to have what's normally called cutter stock to flush out the number six fuel oil out of the lines. And that is normally burned for at least a few minutes or a minute or two, both at startup and the shutdown to clear the

And that is approximately the same viscosity as distillate fuel oil. The burners don't know the difference. The boiler doesn't know the difference. And so it is implausible to me as to how it could be that it is difficult or

lines both to and from the tanks.

1 almost impossible to burn number two in the Encina

- 2 Power Plant.
- I have to say that I've never been
- 4 inside the Encina Power Plant, itself. I have, in
- 5 a previous life, I've been inside three or four of
- 6 Southern California Edison and L.A. Department of
- 7 Water and Power power plants. They were built by
- 8 the same person, the same age.
- 9 And I have witnessed the burning of
- 10 distillate oil in those power plants. And we have
- 11 sold them distillate oil, I have sold those people
- distillate oil to be burned in those power plants.
- So, it's implausible to me. And I guess
- 14 I'd have to talk to the Encina guy to figure out
- what he's saying. Doesn't make any sense.
- 16 Q There was also some testimony regarding
- the availability of fuel oil with sulfur content
- of less than .5 percent. Do you have an opinion
- 19 as to whether or not such fuel oil is available in
- 20 California?
- 21 A Well, you know, there are very very few
- 22 places in California where number six residual
- fuel is capable of being burned anyway, so it's
- 24 not implausible to me that he can't call up and
- find a bunch in storage, because no one, no

1 refiner keeps a inventory of something for which

- there's no customer.
- If he asked them to blend a fuel to
- 4 those specifications, .2, .3, it's perfectly
- 5 available. That's a fuel that's sold on the New
- 6 York Nynex, and there's hundreds and thousands, or
- 7 I guess thousands of contracts for fuel sold
- 8 around the world.
- 9 It's a major product of countries like
- 10 Indonesia that are certainly within the sphere of
- 11 supply of southern California. So it doesn't
- surprise me that he couldn't call and get a load
- of low sulfur number six in southern California,
- because there's no customers for that.
- But if he asked them, if he gave them a
- month, if he explained the supply to anywhere in
- 17 the east coast, gulf coast, Indonesia, Alaska,
- Japan, Germany, it's a common fuel that's sold in
- 19 commerce.
- 20 Q Can you give us some information on the
- 21 price differential between number six residual and
- 22 the fuel that you just testified is readily
- 23 available commercially?
- 24 A It is true that higher sulfur fuels and
- 25 higher viscosity fuels tend to be cheaper than

1 lower viscosity fuels and lower sulfur fuels. And

- 2 that quality differential tends to vary over time.
- The difference between .2 percent sulfur
- 4 number six and .5 percent sulfur number six is
- 5 probably in the order of 2 or 3 percent, something
- 6 along that line, would be sort of a standard
- 7 differential.
- 8 Between number six as a generic fuel and
- 9 number two as a generic fuel, or distillate as a
- 10 generic fuel, that differential is probably in the
- order of 15 percent with maybe a minimum of 10,
- maximum of 20, depending upon the season,
- 13 availability. How much notice you give these
- 14 people to plan for that customer.
- 15 Q And is there an ultra low sulfur fuel
- 16 that would be even cleaner than the number two
- that you're referring to that would be capable of
- 18 being burned in these units?
- 19 A Yes, there are both grades of sulfur in
- 20 number two ranging from .5 percent sulfur number
- 21 two, which you can buy, down to what is normal in
- 22 the State of California, which is about, has a
- 23 specification of .05, or one-tenth the sulfur, and
- 24 normally runs about 300 ppm or .03.
- 25 You can also buy at -- BP AMOCO and

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1 Chevron have announced the availability of .01 \,
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- 2 percent sulfur distillate fuel today. Regulations
- 3 are tightening so that that will become the fuel,
- 4 the normal fuel in commerce at .01 percent --
- 5 HEARING OFFICER GEFTER: Excuse me, Mr.
- 6 Caldwell. I'm sorry to interrupt. Two questions.
- 7 One is you said that regulations are now
- 8 tightening the type of fuel that can be sold and
- 9 burned in California, is that what --
- 10 MR. CALDWELL: That's correct.
- 11 HEARING OFFICER GEFTER: And what agency
- is establishing those regulations?
- MR. CALDWELL: Those are CARB
- 14 regulations --
- 15 HEARING OFFICER GEFTER: CARB.
- MR. CALDWELL: -- for both on-road and
- 17 off-road distillate fuels.
- 18 HEARING OFFICER GEFTER: And may I ask
- 19 the Air District, Mr. Moore, a question? With
- 20 respect to the pollutants that Mr. Rubenstein
- 21 indicated would be emitted from the burning of
- fuel oil in both the Encina and South Bay plants,
- 23 could the Air District require those plants to use
- 24 ultra-low sulfur fuel as part of your permit
- 25 process?

1 MR. MOORE: They haven't applied for any

- 2 modifications of their permit at this time. In
- 3 context of a curtailment scheme with the PUC, that
- 4 might be a requirement that the PUC would make.
- 5 But right now they have not applied to modify the
- 6 permits, and our current rule allows a half a
- 7 percent sulfur in oil.
- 8 HEARING OFFICER GEFTER: And, Mr.
- 9 Caldwell, following up on your testimony that you
- 10 understand CARB is promulgating regulations on the
- 11 sale of low sulfur fuel, do you have any idea of
- 12 the timeline on that?
- MR. CALDWELL: If my memory serves me
- 14 correct that the next ratchet of sulfur content
- 15 for distillate fuels -- now I want to make clear
- 16 that as Steve Moore pointed out, we're not talking
- 17 about number fuel oil, you know, CARB does not
- have a regulation on the books for the alternate
- 19 backup fuel, to my knowledge anyway, that could be
- 20 burned in Encina and South Bay. That is a
- 21 District rule.
- 22 What I was speaking to is the
- 23 availability of alternate low sulfur fuels that
- are items in commerce and they're sold in much
- 25 higher quantities than what we're talking about

1 here. And therefore, are available to be burned

- 2 if someone wanted to.
- 3 In that context the next ratchet of CARB
- 4 rules is 2002, the end of 2002. And as I stated,
- 5 there are at least two refiners in the State of
- 6 California that have announced in advance of those
- 7 rules that they are offering for sale, I believe
- 8 BP AMOCO's announcement was 15 ppm, which is .0015
- 9 sulfur fuel.
- 10 HEARING OFFICER GEFTER: All right. Mr.
- 11 Carroll, do you want to move on with your
- 12 questions.
- 13 MR. CARROLL: Yes, at this time we don't
- 14 have any further questions of Mr. Caldwell and
- he's tendered for cross-examination.
- 16 HEARING OFFICER GEFTER: Thank you.
- 17 Does staff have cross-examination?
- 18 MR. OGATA: Staff has no questions.
- 19 HEARING OFFICER GEFTER: Cabrillo.
- MR. VARANINI: We have a few.
- 21 CROSS-EXAMINATION
- 22 BY MR. VARANINI:
- 23 Q I'd like to ask Mr. Caldwell a couple
- 24 questions about his background, because I think
- 25 that his synoptic knowledge is very very

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1 impressive.
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- 2 HEARING OFFICER GEFTER: Just ask the
- 3 question, please.
- 4 MR. VARANINI: Okay.
- 5 BY MR. VARANINI:
- 6 Q Mr. Caldwell, do you have legal
- 7 training, are you an attorney?
- 8 A No.
- 9 Q And do you, in your current position
- 10 with your current company, do you engage in air
- 11 analysis and emissions management types of
- 12 analyses for clients?
- 13 A Yes.
- 14 Q And did you work with the applicant here
- on the mobile offset program?
- 16 A Yes.
- 17 Q And you indicate that you are currently
- in the investment business, yourself, is that
- 19 right? In the energy investment business is on
- 20 your rÇsumÇ?
- 21 A Yes, I do.
- Q And does that help --
- 23 A I am not currently. I can this, as we
- 24 sit here and speak, I do not currently am not
- investing in any project for my own equity.

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1 Q Okay.
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- 2 A But I do that as a normal course of
- 3 business --
- 4 Q And do you advise others in terms of
- 5 purchase and sale of energy assets or development
- 6 programs?
- 7 A Yes.
- 8 Q And did you provide any advice to this
- 9 particular applicant in terms of that area of
- 10 expertise?
- 11 A This applicant, I assume you mean Otay
- 12 Mesa?
- 13 Q That's the one.
- 14 A And what was the area of expertise you
- 15 were --
- 16 Q Your financial expertise.
- 17 A No.
- 18 Q In terms of your electricity advice to
- 19 clients, do you utilize models to advise them?
- 20 A It's hard to avoid the use of models
- 21 these days, especially if you deal with the Energy
- 22 Commission.
- 23 Q I don't mean to insult you, but there
- 24 was some -- you might have been present when there
- 25 was some concern about this. Do you know what a

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1 cost production model is?
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- 2 A Yes.
- 3 Q And a chronologic cost production model?
- 4 A Yes.
- 5 Q And a residual program coming off of a
- 6 chronologic production cost model?
- 7 A I'm not totally familiar with the term
- 8 residual program. I mean it is true, it is a
- 9 common practice to flange up a spreadsheet or
- 10 something like that off the end of a cost
- 11 production model so that you can get the output in
- 12 a different form, in a form that you want. But I
- don't know the word residual in that context.
- 14 HEARING OFFICER GEFTER: Mr. Varanini,
- what is the relevance of this?
- MR. VARANINI: I'm just trying --
- 17 HEARING OFFICER GEFTER: The witness
- 18 testified about fuel oil.
- MR. VARANINI: That's exactly the
- 20 questions I want to ask. I'm just laying some
- 21 foundation because what I'm concerned about is
- that we're actually being given advice and we are
- 23 grateful for that advice in the sense of the
- 24 record here in terms of a better fuel and better
- 25 emissions control --

1 HEARING OFFICER GEFTER: Fine, you could

- 2 talk to him about that off the record. Just go on
- 3 with your questions and try to keep them relevant.
- 4 MR. CALDWELL: Do you want my rates for
- 5 giving that advice?
- 6 MR. VARANINI: Yeah, yeah, you might as
- 7 well.
- 8 (Laughter.)
- 9 BY MR. VARANINI:
- 10 Q In terms of your judgments about
- 11 alternative fuels, did you do any study of the
- 12 tanks and pipelines and other capabilities at the
- 13 Encina plant?
- 14 A No
- 15 Q Do you know when the last time oil was
- 16 burned at the Encina plant?
- 17 A I heard today it was last week. Maybe
- it's being burned now, I don't know, but it's, you
- 19 know, --
- 20 Q And what was the period of time before
- 21 that, do you know when it was last burned before
- last week?
- 23 A I don't know.
- Q Would you change your testimony if you
- were told that oil hadn't been burned in that

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1 facility and had remained in that facility for
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- 2 over ten years?
- 3 A Well, I guess that would make me more
- 4 confident in my testimony because what you're
- 5 saying is that the equipment was designed ten
- 6 years ago, and was at least running and operating
- 7 ten years ago. And nothing has been changed,
- 8 nothing has been taken out in that period of time
- 9 which would prevent that.
- 10 And so it doesn't -- it would make me
- 11 more confident of my testimony.
- 12 Q As a plant manager would you have
- confidence in a system that's been used two times
- over a ten-year period?
- 15 A If I was a prudent plant manager I would
- 16 certainly, if I was notified of the possibility of
- 17 a curtailment, I would certainly make sure that I
- 18 understood what the condition of the equipment
- 19 that I had under my control was, yes.
- 20 HEARING OFFICER GEFTER: Mr. Varanini,
- 21 is this a hypothetical, or is this an actual fact,
- 22 that fuel oil had not been burned in the last ten
- 23 years?
- MR. VARANINI: We have witnesses --
- 25 HEARING OFFICER GEFTER: We haven't

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1 heard the witnesses say that.
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- MR. VARANINI: Yes, you did. Mr.
- 3 Weatherwax was talking about the inventory
- 4 yesterday and he indicated that, if I remember
- 5 correctly, because he said a lot of things,
- 6 essentially that the oil that was used for the
- 7 burn prior to last week was the same oil burned
- 8 last week, and it had been there for a very very
- 9 long period of time, I believe ten years.
- 10 MR. CARROLL: Well, I don't think you
- 11 can draw a conclusion from that. And furthermore,
- 12 I remember Mr. Weatherwax's testimony quite to the
- 13 contrary, because it was quite clever. I believe
- 14 he said that there was less, which would imply to
- me that it had been burned in the interim.
- 16 HEARING OFFICER GEFTER: We will --
- MR. VARANINI: Well, it was a draw-
- 18 down --
- 19 HEARING OFFICER GEFTER: -- look at the
- 20 transcript. Okay, --
- 21 MR. CALDWELL: Well, I could answer
- 22 that, too, but --
- 23 HEARING OFFICER GEFTER: -- we're going
- off the record.
- 25 (Off the record.)

1 HEARING OFFICER GEFTER: Back on the

- 2 record.
- 3 BY MR. VARANINI:
- 4 Q Mr. Caldwell, have you reviewed the age,
- 5 condition and changes necessary on the tanks at
- 6 Encina to burn distillate?
- 7 A No.
- 8 Q Is distillate a much more volatile fuel
- 9 than number six?
- 10 A No.
- 11 Q Why do you say that?
- 12 A It has the same flash point, because the
- 13 flash point of number six is generally controlled
- 14 by the amount of number two that is blended into
- 15 number six in order to get the viscosity right.
- 16 Q Does it have the same volatility?
- 17 A It has the same volatility. Flash
- 18 point, I mean if you blend a little bit of diesel
- 19 and a little bit of distillate into number six
- 20 fuel, that is the volatility. So it has the same,
- 21 number two and number six have the same
- 22 specification for volatility, ASTM and actual.
- Q Do diesel tankage usually require
- 24 floating roofs?
- 25 A No.

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1 MR. VARANINI: I just have a question.
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- 2 Did you introduce his prefiled testimony or is
- 3 that not an issue here?
- 4 MR. CARROLL: No, we did not.
- 5 HEARING OFFICER GEFTER: What I have is
- 6 part of it is exhibit 75, part of his testimony.
- 7 And then he also submitted additional testimony as
- 8 exhibit 85.
- 9 MR. CARROLL: We're not putting forth
- 10 that portion of 75. We're presenting Mr. Caldwell
- 11 exclusively for purposes of rebuttal to the
- 12 testimony of Mr. Rubenstein.
- 13 HEARING OFFICER GEFTER: Thank you.
- MR. CARROLL: That's with respect to 75.
- 15 With respect to 85 I believe that was the variance
- 16 information which has already been admitted into
- 17 the record.
- 18 HEARING OFFICER GEFTER: Correct.
- 19 BY MR. VARANINI:
- Q Would you --
- 21 A One --
- 22 O Sure.
- 23 A I answered a quick no to his last
- 24 question and I think I probably better clarify
- 25 that in the sense that --

1 HEARING OFFICER GEFTER: What was the

- 2 question?
- 3 MR. CALDWELL: The question was is
- distillate, as I recall, does distillate fuel
- 5 normally require floating roofs, was that correct?
- 6 BY MR. VARANINI:
- 7 Q Tankage, yes.
- 8 A Yes. Some distillates do require
- 9 floating roofs. Distillate is a generic term. It
- 10 means that it is boiled overhead. The number two
- 11 fuel oil does not normally require floating roofs.
- 12 Some distillates do require floating roof --
- Q Are there --
- 14 A -- more volatile distillates.
- 15 Q Are there higher numbers, is that the
- 16 way it works?
- 17 A Well, there is number one, which is
- 18 normally called kerosene. When you get lighter
- 19 than that, you're talking about gasoline and there
- 20 is no -- the common designation goes away from
- 21 fuel oil. That doesn't use for anything lighter
- than number one.
- 23 Q Is number two more explosive than number
- 24 six in terms of exposure to the public in a risk
- assessment?

1	Λ	No.
_		INO.

- Q Would you do a risk assessment before
 you committed number two to a number six tankage
 at Encina or a plant like that?
- A You know, it would certainly be
 reasonable to make an assessment along those
 lines. I would suspect that that assessment would
 come out that there may be some minor changes,
 maybe some pump gear ratios, maybe some orifice
 sizes.
- I would certainly want to look to make

 sure that there was no corrosion; that the

 pressures were the same; that, you know, the tank

 bottom didn't have a big hole in it, or if it did,

 that I made sure that I left a little bit of water

 in the tank so that I didn't leak any oil.

17 Those sorts of things. But that's -- I 18 would not consider that to be a major risk 19 assessment or a major capital investment. We're 20 talking about, you know, I would write some orders 21 in an order book and have somebody check those 22 things out. And maybe I'd have to go down to the hardware store and buy a few parts. That's the 23 24 way I would characterize what I would have to do.

25 HEARING OFFICER GEFTER: Thank you, Mr.

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1 Caldwell.
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- 2 (Laughter.)
- 3 MR. CALDWELL: I'm exaggerating for the
- 4 sake of emphasis.
- 5 MR. VARANINI: And ARCO is now --
- 6 HEARING OFFICER GEFTER: Okay, let's
- 7 move on.
- 8 MR. VARANINI: And ARCO is now British
- 9 Petroleum, isn't that right?
- MR. CALDWELL: Correct, yes.
- 11 MR. VARANINI: I just have a couple of
- 12 additional questions.
- 13 BY MR. VARANINI:
- 14 Q Did you provide any advice to the
- 15 applicant on dual fuel technology for their
- 16 facility?
- 17 A I did participate in a group which did a
- 18 survey of alternates for alternate fuels for Otay
- 19 Mesa.
- 20 Q And what was the result of that survey,
- if you remember?
- 22 A I did not participate in any of the
- 23 decisions. I don't knwo what the answer was. I
- 24 provided input to that. And I was never asked for
- any conclusions. And I never gave any

- 1 conclusions.
- 2 But I did provide input into that study.
- 3 Q In your analysis did you look at propane
- 4 or CNG as a backup fuel?
- 5 A I looked at propane and CNG and
- 6 discarded them. What I did do is I provided for
- 7 the client some parameters that they might want to
- 8 look at if they used either number two distillate,
- 9 synthetic alternates to number two distillate, and
- 10 LNG as opposed to CNG.
- 11 Q And if you went to an alternate, would
- 12 you have to modify any of the burner system or
- pipe systems that were basically provided to the
- 14 natural gas plant?
- MR. CARROLL: I'm going to object to
- this line of questioning. We didn't present this
- 17 witness on the issue of alternatives. We did have
- 18 Mr. Williams earlier today as alternatives witness
- 19 who testified to the dual fuel analysis that was
- 20 done. And we're well beyond now the scope of the
- 21 original testimony of Mr. Caldwell.
- 22 HEARING OFFICER GEFTER: Your objection
- is sustained.
- 24 BY MR. VARANINI:
- Q Mr. Caldwell, do you know of any PG&E

1 National projects in the east that have dual fuel?

- 2 MR. CARROLL: Relevancy.
- 3 HEARING OFFICER GEFTER: The objection
- 4 is sustained.
- 5 MR. CALDWELL: Yes.
- 6 MR. VARANINI: Thank you very much.
- 7 (Laughter.)
- 8 MR. VARANINI: I have no further
- 9 questions.
- 10 HEARING OFFICER GEFTER: Duke.
- MS. LUCKHARDT: No questions.
- 12 HEARING OFFICER GEFTER: Ms. Duncan.
- MS. DUNCAN: No questions.
- MR. CLAYCOMB: Save Our Bay, none.
- 15 HEARING OFFICER GEFTER: Thank you, Mr.
- 16 Caldwell.
- 17 Are there any --
- MS. DUNCAN: Ms. Gefter, I have a
- 19 procedural question. On my air quality testimony
- 20 you said that was exhibit 70. It's actually
- 21 exhibit 83.
- 22 HEARING OFFICER GEFTER: All right,
- thank you. I'm sorry I missed that.
- MS. DUNCAN: So I'd like to have that
- put on record.

1	HEARING OFFICER GEFTER: You would like
2	that received into evidence?
3	Is there any objection to exhibit 83
4	being received into the record?
5	MR. CARROLL: No.
6	HEARING OFFICER GEFTER: Okay.
7	MR. CARROLL: One additional procedural
8	matter
9	HEARING OFFICER GEFTER: Well, let's go
10	through this, unless it's with respect to 83.
11	Hearing no objection to exhibit 83 being received

into evidence, it is now part of the record.

13 Exhibit 83.

12

- MS. DUNCAN: Thank you.
- 15 HEARING OFFICER GEFTER: Okay, Mr.
- 16 Carroll.
- 17 MR. CARROLL: I raise it now because
- it's responsive to Ms. Duncan's comments. We did
- 19 submit written responses to Ms. Duncan's comments,
- 20 including on the distributed generation. It was a
- 21 portion of exhibit 77, and we realized at this
- point that we did not enter that portion of 77
- 23 into the record.
- 24 At some point, it doesn't need to be
- 25 today or now, we would put Mr. Chilson back on the

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1 stand to enter that in. And we just wanted to
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- 2 make sure that our responses to the issues that
- 3 had been raised by Ms. Duncan are entered into the
- 4 record.
- 5 HEARING OFFICER GEFTER: All right. I
- 6 understand that the entire exhibit 77 will be
- 7 moved into the record at the conclusion of all the
- 8 hearings.
- 9 MS. LUCKHARDT: So does that include or
- 10 not include Mr. Caldwell's testimony?
- MR. CARROLL: Does not.
- 12 MS. LUCKHARDT: Prefiled. Does not.
- MR. CARROLL: Does not.
- 14 HEARING OFFICER GEFTER: So we will take
- 15 that out of exhibit 77?
- MR. CARROLL: That's correct.
- 17 HEARING OFFICER GEFTER: All right.
- MS. LUCKHARDT: And then Mr. Chilson
- 19 will respond to responses to Ms. Duncan's data
- 20 request, is that correct? Will be offering that
- 21 evidence?
- MR. CARROLL: Generally the answer to
- 23 that is yes. And I haven't had a chance to look
- 24 at HD-2, which is the one that you're concerned
- 25 about. So there may be somebody else who's better

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1 prepared to answer that. I just need to look at
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- what the topic of that particular response was.
- But, generally yes, Mr. Chilson will
- 4 respond to any questions about the responses to
- 5 Ms. Duncan.
- 6 MS. LUCKHARDT: Okay, I'm just trying to
- 7 figure out who.
- 8 HEARING OFFICER GEFTER: All right, at
- 9 this point I don't believe there are any more air
- 10 quality witnesses.
- MR. VARANINI: Yes, ma'am.
- 12 HEARING OFFICER GEFTER: You have
- 13 another witness?
- MR. VARANINI: We'd like to recall Gary
- Rubenstein to rebut the testimony of Mr. Caldwell.
- 16 HEARING OFFICER GEFTER: How much time
- 17 will it take?
- MR. VARANINI: We'll have to ask him.
- 19 HEARING OFFICER GEFTER: Okay, off the
- 20 record.
- MR. VARANINI: Five minutes.
- (Off the record.)
- 23 HEARING OFFICER GEFTER: Back on the
- 24 record.
- 25 MR. VARANINI: Cabrillo calls Gary

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1 Rubenstein as a rebuttal witness to the testimony

- of Mr. James Caldwell. He's been previously sworn.
- Whereupon,
- 4 GARY RUBENSTEIN
- 5 was recalled as a witness herein and having been
- 6 previously duly sworn, was examined and testified
- 7 further as follows:
- 8 DIRECT EXAMINATION
- 9 BY MR. VARANINI:
- 10 Q Mr. Rubenstein, you heard Mr. Caldwell's
- 11 testimony, did you not?
- 12 A Yes, I did.
- 13 Q And do you have a response to his
- 14 testimony?
- 15 A Yes, I do. I'll just touch on the
- 16 highlights.
- 17 Mr. Caldwell indicated that he had
- 18 concerns about at least three aspects of the
- 19 calculations presented in my written testimony.
- 20 First he referred to what he called the SOx
- 21 emissions discrepancy for Otay Mesa that was a
- reference to the discussion that I had with Mr.
- 23 Carroll about the difference in SOx emissions
- 24 factors for Otay Mesa as compared with the Encina
- and South Bay boilers.

Τ	As I had indicated earlier to Mr.
2	Carroll in response to a question on that subject,
3	the discrepancy is that the emissions estimates
4	prepared by the applicant for Otay Mesa were based
5	on a sulfur content much higher than typical
6	natural gas sulfur levels in southern California.
7	The Otay Mesa number was high. It's not
8	that the other numbers were low. And I did not
9	use the Otay Mesa SOx emission factor in any of my
10	calculations.
11	Second, Mr. Caldwell indicated that the
12	reference I made to emissions estimates except for
13	NOx representing my best judgment were somehow
14	inconsistent with the footnotes. I don't see the
15	inconsistency, and he didn't express specifically
16	what that inconsistency might be.
17	Third, Mr. Caldwell suggested that the
18	generation total that I used in all of my
19	analyses, which is 32,700 megawatt hours in a day
20	total for the Encina and South Bay plants were
21	somehow incredible to him.
22	As noted in footnote 20 on page 8 of my
23	testimony, that is the actual gross generation

matter how incredible that might be to

from those two plants on August 22, 1998, no

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1 Mr. Caldwell. That's what the actual number was.
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- 2 And that was not an isolated case.
- 3 We had reviewed, in response to request
- 4 from the San Diego Air District, peak day
- 5 generation for the period between January 1, 1995
- 6 and August 15, 2000. And the value of 32,700
- megawatt hours in a day is not an isolated case.
- 8 There are a number of days throughout that period,
- 9 peak generation days, in which those units were
- 10 running very hard. And running very hard for 24
- 11 hours.
- 12 Next, Mr. Caldwell indicated that
- 13 because of the number of conservatisms he believed
- 14 that my emissions estimates were overstated by a
- 15 factor of five to ten. He presented no backup for
- 16 that. I presented a number of analyses before
- 17 this Commission in a variety of different
- 18 proceedings. I can't respond to anything
- 19 specifically because he didn't back his claim up.
- 20 But suffice it to say my conclusion is that that
- 21 claim is ludicrous.
- 22 Finally, there was an extensive
- 23 discussion by Mr. Caldwell about how you could go
- to a hardware store to pick up enough parts to
- 25 convert the Encina and South Bay power plants so

1 that they could run on distillate fuel instead of

- 2 residual fuel oil.
- Rather than having a debate between
- 4 consultants, the plant manager for the South Bay
- 5 Power Plant is right here. And if the Committee
- does wish to receive additional information on
- 7 that topic specifically, we could have him come up
- 8 and talk to you about it. I can assure you it's a
- 9 lot more than the parts you can find in a hardware
- 10 store.
- 11 That concludes my comments.
- MR. VARANINI: He's available for
- recross.
- 14 HEARING OFFICER GEFTER: Do you have
- 15 cross of the witness?
- MR. CARROLL: Just a couple of
- 17 questions.
- 18 CROSS-EXAMINATION
- 19 BY MR. CARROLL:
- 20 Q The 32,700 number that you referred to,
- 21 has that ever occurred with Otay Mesa Generating
- 22 Project in the system?
- 23 A Obviously not.
- 24 Q Has that ever occurred during a natural
- gas curtailment?

1	A	There	have	been	no	natural	gas

- 2 curtailments to the best of my knowledge between
- 3 January 1st of '95 and August 15, 2000. And that
- 4 was the only period I reviewed.
- 5 So during that period, no, it did not
- 6 occur in conjunction with a natural gas
- 7 curtailment.
- 8 MR. CARROLL: Thank you.
- 9 HEARING OFFICER GEFTER: Where did you
- 10 get that information, Mr Rubenstein, with respect
- 11 to curtailment?
- 12 MR. RUBENSTEIN: We had, at the request
- of the Air District, collected daily operation
- data and fuel consumption data for those plants
- from January 1, 1995 to the present.
- 16 And I'm not comfortable extrapolating
- 17 before that date.
- 18 HEARING OFFICER GEFTER: The question is
- 19 did you get that information from the Encina
- 20 Plant, itself, its records? Or from the Air
- 21 District's records?
- MR. RUBENSTEIN: We got that information
- 23 from the plant records maintained by both the
- 24 Encina and South Bay Plants.
- 25 HEARING OFFICER GEFTER: So that

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1 information also indicates that South Bay has also
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- 2 not been curtailed since '95?
- MR. RUBENSTEIN: Yes.
- 4 HEARING OFFICER GEFTER: Does staff have
- 5 any questions for the witness?
- 6 MR. OGATA: No.
- 7 HEARING OFFICER GEFTER: Duke? Do you
- 8 have questions of the witness?
- 9 MS. LUCKHARDT: I don't have any
- 10 questions of the witness.
- 11 HEARING OFFICER GEFTER: All right,
- thank you. The witness may be excused, thank you.
- MR. CARROLL: One additional procedural
- 14 point. You had asked us to raise the issue of
- exhibits 89 and 90 in connection with Mr.
- 16 Caldwell. And we wanted to make sure we were
- 17 going to do that.
- 18 HEARING OFFICER GEFTER: Is there
- 19 objection to the receipt into evidence of exhibits
- 20 89 and 90?
- 21 Hearing no responses, exhibits 89 and 90
- are received into the record. Thank you.
- We also understand there is a member of
- 24 the public who wanted to address us on air
- 25 quality. Before we go on to the next topic, if

1 you'd come forward at this time. Sit at the

- 2 microphone and tell us your name and the
- 3 organization that you're with.
- 4 MS. McCUTCHAN: Sure. Hello, everybody.
- 5 My name is Melanie McCutchan; I'm here on behalf
- of the Environmental Health Coalition. We're a
- 7 public health and environmental justice
- 8 organization that has been working in San Diego
- 9 for 20 years now.
- 10 My comments are directly specifically to
- 11 the PM10 mitigation package. Let me say first
- that our organization is very pleased that the
- mitigation is going to target combustion sources
- and is going to do so in the area of the plant.
- Both the applicant and staff have been supportive
- of that idea, and I appreciate that.
- 17 Environmental Health Coalition's concern
- is how the mitigation fee has been determined.
- 19 And our concern is that it doesn't really reflect,
- it's not really connected to health impacts.
- 21 In the sense that, you know, ideally the
- 22 mitigation should be roughly proportional to the
- 23 health impacts, the health benefits from the
- 24 mitigation should be roughly proportional to any
- 25 health costs created by Otay Mesa's emissions.

1	And there were certain assumptions that
2	we were willing to go with, and in order to accept
3	a less than ton-for-ton tradeoff. And that
4	assumption was that the diesel PM10 reductions
5	would provide ancillary health benefits because
5	there's so many carcinogens and mutagens in the
7	diesel particular matter that aren't in the Otay
3	Mesa's particulate matter.

Also it's been talked about that that mitigation is going to be occurring at receptor level, and to sensitive populations. Children are going to be the -- are going to have their exposure reduced.

And our concern, however, is that we wanted to have some assurance so that, you know, the Committee and all parties involved could be confident that the mitigation really was roughly proportional to the Otay Mesa's emissions.

The applicant performed a study on cancer risk and found that diesel PM appears to be approximately 100 times more dangerous in terms of cancer risk than the Otay Mesa's emissions.

23 And both Environmental Health Coalition 24 and American Lung Association asked that a study 25 be done on the noncancer risks associated with

1 Otay Mesa's 170 tons of PM emissions, to have some

- 2 sort of idea of how much diesel -- reductions in
- 3 diesel emissions should be required.
- 4 And that was never done by staff or the
- 5 applicant. And I think that staff, in particular,
- 6 was concerned about trying to develop some sort of
- 7 ratio of, you know, diesel reductions to mitigate
- 8 for the Otay Mesa's combustion source reductions.
- 9 And I understand that because the health
- 10 benchmarks are subject to uncertainty.
- 11 But my concern is that for future cases
- 12 there be a better attempt at trying to determine
- what the health impacts really are of some of
- 14 these mobile and particular diesel mobile emission
- 15 reduction offsets are, so that the public and
- 16 everybody involved can be more confident that the
- 17 mitigation really is appropriate.
- 18 Specifically related to this project,
- 19 however, we are concerned that staff has -- the
- 20 way that staff came up with their \$1.7 million
- 21 mitigation sum was basically because there was no,
- 22 it was very difficult to determine an appropriate
- 23 mitigation sum based on the greater health -- or
- the health costs, the relationship between the
- 25 health costs of Otay Mesa's emissions and the

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1 health benefits of the diesel reductions.
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mitigation fee.

- In the face of that uncertainty you

 might want to go for a one-to-one mitigation. But

 because that would be cost prohibitive in the Otay

 Mesa area for the applicant to do that, staff went

 through another process to determine that

 mitigation fee. And that was to -- and I believe

 determine what would be an economically fair
- And to do that staff took the statewide

 average cost of a PM10 ERC, emission reduction

 credit, and multiplied that out by the number of

 tons. And that's where the \$1.7 million came

 from.
- 15 And I'm just concerned that staff has
 16 receded from that position and compromised at \$1.2
 17 million. And I urge the Committee to require the
 18 full \$1.7 million mitigation fee.
- One of the things that the applicant has
 said should be taken into account for reasons why
 that mitigation fee should not be the entire \$1.7
 million is that a cheaper mitigation option of
 road paving was available.
- 24 But that argument has no grounds because 25 that road paving mitigation option was never

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1 considered appropriate by staff, because of new
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- 2 information about the difference between the
- 3 health impacts, of course, and fine particulate
- 4 matter.
- 5 So, just to reiterate, I urge the
- 6 Committee to demand the entire \$1.7 million
- 7 mitigation fee.
- 8 Thank you. That's all.
- 9 PRESIDING MEMBER LAURIE: Thank you,
- 10 ma'am.
- 11 HEARING OFFICER GEFTER: Thank you. Are
- there any other public comments? Yes. Please say
- 13 your name and the organization you represent.
- MS. CONCHA-GARCIA: Susanna Concha-
- 15 Garcia representing the American Lung Association.
- I would like to respectfully say that we
- 17 agree and we support the Environmental Health
- 18 Coalition's request for the full \$1.7 million
- 19 mitigation fee.
- 20 As part of that, we feel very strongly
- 21 that as part of the permitting process that there
- 22 be public input as to how this is to be allocated
- and be localized to the South Bay area.
- It's very important because these are
- 25 the residents that are going to be impacted by the

- 1 excess PM10 emissions.
- 2 The other thing is that there have been
- 3 suggestions as to depositing this money with APCD.
- 4 And that we have similar criteria, Carl Moyer, et
- 5 cetera. However we want any criteria that is used
- 6 to determine how this money should be spent still
- 7 preference the residents in the South Bay area.
- 8 We've discussed things during numerous
- 9 PM10 mitigation workshops having to do with
- 10 lawnmower exchanges, CNG bus purchases, airport
- 11 field equipment, you know, be electrified or run
- 12 by CNG.
- To me all those options are still
- 14 available. We, however, do support the use of the
- 15 fees for purchases of school buses, et cetera,
- 16 because they affect -- for those school buses in
- the South Bay area, because they would help to
- 18 mitigate some of the health effects of the
- 19 children living in the area or traveling in the
- 20 area.
- 21 And that is -- and to reiterate Holly's
- 22 and Melanie's and my concern, you know, we still
- 23 haven't heard any analysis of what noncancerous
- health effects there are to the region by PM10,
- and what that's going to cost the residents now

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1 and the future residents, especially with a power
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- 2 plant lifespan of at least 30 years.
- 3 So, we're not sure that even the \$1.7
- 4 million is even a fair amount at this point.
- 5 HEARING OFFICER GEFTER: Thank you.
- 6 We're going to hear public health testimony in a
- 7 little while about noncancer health effects.
- 8 There's another person from the public
- 9 who would like to address us? Thank you. Please
- 10 say your name for the record and tell us what
- organization you represent.
- 12 MR. TALWAR: My name is Mahesh Talwar.
- 13 I'm President and CEO of OceanAir Fuels -- we make
- and manufacture bio fuels. Bio fuels are made
- from grease collected from McDonald's and whatnot.
- And basically it's used as a diesel in any engine.
- No change required whatsoever.
- 18 We currently produce 10 million gallons
- 19 a year bio fuel. It is being supplied 220 garbage
- 20 trucks in San Jose, so it is coming to west coast.
- 21 So with that as a background I wanted to
- 22 address four issues very quickly here. There's a
- lot of talk and discussion today about curtailment
- and whatnot of natural gas and use of fuel oil.
- 25 I want to bring another option to the

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1 Committee and to the applicant, as well, which is
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- 2 to use a bio fuel. We can supply it. We have the
- ability to supply it. It's got no sulfur, no
- 4 toxic emissions to worry about. Because of no
- 5 sulfur there is very very minimal PM10 emissions
- 6 to worry about by the use of that fuel.
- 7 So it will make the use of that fuel as
- 8 a backup a very attractive solution. And it can
- 9 be used with SCR.
- 10 The second point I wanted to bring to
- 11 your attention is the use of bio fuel for use in
- 12 construction equipment, as a construction
- 13 mitigation.
- 14 It's a very appropriate fuel. No
- infrastructure changes required, no diesel engine
- 16 modification required. So I'd like to see that
- included as an option, mitigation option for PM10.
- Third, I agree with the previous two
- speakers, the 1.7 and 1.2 or whatever the amount
- 20 comes out to be, there's a lot of talk about using
- 21 that for CNG school buses, giving it to the
- 22 District and whatnot, which is fine and
- 23 appropriate. But you want to make sure there are
- options available that this can be used for other
- 25 PM10 reduction approaches like they use a bio fuel

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or any other option that may be out there. So,
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- 2 we'd like to see language included addressing that
- 3 issue, as well.
- 4 Lastly, I wanted to address the whole
- 5 issue of this PM10 mitigation and the so-called --
- 6 I do not believe it's in the best public interest
- 7 and best interests for the Committee and the
- 8 Commission, as a public body, to look at any
- 9 option which is geared towards -- when there are
- 10 other options out there.
- 11 Specifically I bring to your attention
- the analysis that was done for road paving. I
- 13 know that there has been a lot of discussion and
- 14 talk about the use of CNG school buses and whatnot
- that can reduce toxic emissions and carcinogenic
- 16 pollutants.
- 17 Under CEQA guidelines there is no
- 18 requirement to do that, as part of PM10
- 19 mitigation. Those are ancillary benefits. We are
- 20 looking at PM10 mitigation as part of this
- 21 project, and therefore that's where the issue
- needs to be focused, what is bringing the PM10
- 23 reduction.
- 24 We are looking at -- a year, the number
- I got off the top of my head, PM10 reduction out

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1 of the option that is to be used when the money is
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- 2 used for certain mobile source emission reduction
- 3 programs.
- 4 The road paving, according to my
- 5 calculations, besides the PM10, the PM10 benefit
- 6 can give even PM2.5, 20, 30 tons. So obviously it
- 7 will mitigate -- it will meet the intent of CEQA.
- 8 And I would urge, rather than looking at --
- 9 pollute system out there, look at very seriously
- 10 what the intent of the law is. And road paving is
- 11 a viable option. It's in the best public
- 12 interests.
- Thank you.
- 14 PRESIDING MEMBER LAURIE: Thank you.
- 15 HEARING OFFICER GEFTER: Thank you.
- 16 Okay.
- 17 COMMISSIONER PERNELL: Excuse me, I have
- 18 a question.
- MR. TALWAR: Sure.
- 20 COMMISSIONER PERNELL: How many barrels
- of fuel can you make a day with your business?
- MR. TALWAR: I'll have to calculate
- 23 barrels and what -- we have 10 million gallons a
- year plant capacity. So, 42 --
- 25 SPEAKER: Ten million gallons of --

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1 MR. TALWAR: Yeah, 42 gallons to a
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- 2 barrel, so whatever that comes out to be.
- 3 COMMISSIONER PERNELL: Okay, that's
- 4 fine. Thank you.
- 5 HEARING OFFICER GEFTER: Thank you.
- 6 With respect to the PM10 mitigation plan,
- 7 apparently the staff and the applicant have come
- 8 to an agreement on, my understanding was that the
- 9 District would monitor the funds, and allocate
- 10 them to whichever program the parties decide upon.
- How many school buses can be retrofitted
- 12 with \$1.2 million. I'd ask Mr. Moore, do you have
- an answer to that?
- MR. MOORE: I have a rough idea; I'm not
- really an expert on that. \$1.2 million, maybe 10
- 16 or 12.
- 17 HEARING OFFICER GEFTER: Mr. Layton.
- 18 MR. LAYTON: There's two components in
- 19 the lower emission school bus program. This is
- 20 covered in the FSA, but since we bring it up here,
- 21 the program recently passed by the Legislature,
- 22 and the ARB is getting ready to adopt it this
- 23 December --
- 24 HEARING OFFICER GEFTER: Yeah, we're
- 25 familiar with the program. I just wanted to know

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1 how many buses you believe could be retrofitted --
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- 2 MR. LAYTON: Well, it depends, well,
- 3 retrofit, replace probably about 12, because each
- 4 bus the program provides \$100,000; the school
- 5 district has to provide the rest. And a CNG bus
- 6 costs approximately \$140,000; clean diesel maybe
- 7 125,000.
- 8 A retrofit, which is our preferred
- 9 option, where you actually go back and take an
- 10 existing school bus and put on an oxidizing soot
- 11 filter or a catalyze diesel particulate filter,
- that may cost anywhere from 3000 to 6000.
- 13 ARB believes the number is going to be
- 14 below 5000 per school bus. So, 1.2 million would
- probably provide about 200 buses retrofit.
- 16 HEARING OFFICER GEFTER: So the retrofit
- 17 would be a lot more cost effective.
- 18 MR. LAYTON: It would also go after more
- 19 PM10 than bus replacement.
- 20 HEARING OFFICER GEFTER: All right.
- 21 MR. LAYTON: Our main goal here is to
- get the money out on the street. We have
- 23 expressed preferences in the condition that we're
- rewritten, and the applicant has looked at and
- agreed to.

1 We do expres	s those preference	ces that the
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- 2 school districts in the area, there's four of them
- 3 which I mentioned earlier, do have the first right
- 4 of refusal for the 1.2 million. And after that it
- 5 can go anywhere.
- But we would like to get the money out
- 7 on the street as opposed to having it sit in the
- 8 District coffers. They are also interested in
- 9 spending the money, too.
- 10 But we look at this PM10 mitigation
- 11 proposal as a cumulative effect. The sooner we
- 12 retrofit the buses the sooner the technology gets
- 13 brought forward. More people will look at the
- 14 technology and see that it works, and also adopt
- it, as well.
- 16 And go after the same money that's there
- 17 from the ARB. If the money doesn't get out there
- and spent, then people do not adopt the
- 19 technology.
- 20 HEARING OFFICER GEFTER: Thank you. The
- 21 next topic -- thank you, Mr. Layton, we're going
- 22 to move on because we're running out of time this
- 23 afternoon.
- MR. LAYTON: Good.
- 25 HEARING OFFICER GEFTER: Our next topic

- 2 (Laughter.)
- 3 HEARING OFFICER GEFTER: -- and does the
- 4 applicant have a witness on public health?
- 5 MR. CARROLL: Yes, the applicant calls
- 6 Mr. John Koehler.
- 7 HEARING OFFICER GEFTER: Mr. Koehler
- 8 will be sworn by the reporter.
- 9 Whereupon,
- 10 JOHN KOEHLER
- 11 was called as a witness herein, and after first
- 12 having been duly sworn, was examined and testified
- 13 as follows:
- 14 DIRECT EXAMINATION
- 15 BY MR. CARROLL:
- 16 Q Mr. Koehler, could you please state your
- 17 name for the record.
- 18 A My name is John Koehler.
- 19 Q And where are you currently employed?
- 20 A URS Corporation.
- 21 Q And could you please briefly describe
- 22 your responsibilities with regard to the Otay Mesa
- 23 Generating Project?
- 24 A With regard to this project I was
- 25 responsible for the public health analysis of the

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- 1 project.
- 2 Q Thank you. And your prepared testimony
- 3 which was submitted in this matter identifies
- 4 several exhibits which you intended to sponsor,
- 5 exhibit 1 is section 5.16 of the AFC covering
- 6 public health; exhibit 32, which is response to
- 7 comments on the health risk assessment completed
- 8 for the project; and exhibit 33, which addresses
- 9 potential acute health risks.
- 10 Are you sponsoring those documents
- 11 today?
- 12 A Yes, I am, exhibits 32 and 33 were
- 13 responses to the Air District comments on the
- 14 health risk assessment.
- 15 Q Thank you for that clarification. Would
- 16 you briefly summarize your testimony.
- 17 A Certainly. We looked at toxic air
- 18 pollutant emissions from the proposed project,
- 19 calculated using the California Air Toxics
- 20 Emission Factors, C-A-T-E-F, sometimes referred to
- as CATEF.
- We ran an air dispersion model to
- 23 calculate ground level concentrations. Then
- 24 applied CalEPA toxicity factors to those maximum
- 25 predicted concentrations.

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1 And this analysis showed that there
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- would be no significant public health impacts.
- 3 And the project would comply with applicable
- 4 regulatory criteria.
- 5 Q Thank you. Does that conclude your
- 6 testimony?
- 7 A Yes, it does.
- 8 MR. CARROLL: Thank you. Mr. Koehler is
- 9 available for cross-examination.
- 10 HEARING OFFICER GEFTER: Mr. Koehler,
- 11 before we go to cross-examination, I have a
- 12 question. It was raised by the members of the
- 13 public who spoke earlier.
- 14 They were concerned about noncancer
- 15 health effects of PM10. Is that something that
- 16 you looked at?
- 17 MR. KOEHLER: Not specifically. I
- 18 looked at individual compounds that were predicted
- 19 by the California Air Toxic Emission Factors.
- 20 Some of those are particulate borne compounds.
- 21 So for those compounds they were
- 22 directly included in the noncancer health risk
- 23 analysis.
- 24 Otherwise, I'd have to refer back to the
- air quality analysis, which did a PM10 analysis,

and did a comparison against regulatory criteria

- with respect to PM10.
- 3 HEARING OFFICER GEFTER: And, Mr.
- 4 Koehler, was your analysis incorporated into the
- 5 final determination of compliance of the Air
- 6 District?
- 7 MR. KOEHLER: Yes, it was.
- 8 HEARING OFFICER GEFTER: Thank you.
- 9 Okay, does staff have cross-examination of the
- 10 witness?
- MR. OGATA: Staff has no questions.
- 12 HEARING OFFICER GEFTER: Does Cabrillo
- have cross-examination?
- MR. VARANINI: No.
- 15 HEARING OFFICER GEFTER: Does Duke have
- 16 cross-examination?
- MS. LUCKHARDT: No.
- 18 HEARING OFFICER GEFTER: Ms. Duncan, do
- 19 you have cross-examination?
- MS. DUNCAN: No.
- 21 HEARING OFFICER GEFTER: Mr. Claycomb?
- MR. CLAYCOMB: Yes, ma'am, this is the
- 23 big one.
- 24 (Laughter.)
- 25 HEARING OFFICER GEFTER: You need to

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1 move the microphone next to you, both microphones,
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- 2 and speak into them.
- 3 PRESIDING MEMBER LAURIE: Before you
- 4 start your questions, I'd ask you to distinguish
- 5 between the statement that you want to make and
- 6 your questions of the witness, so we understand
- 7 that you want to make your own statement, and
- 8 you'll have an opportunity to do that.
- 9 This is your opportunity to specifically
- 10 question the witness on his testimony. We're
- going to ask that your questions be limited to his
- 12 testimony. Okay?
- MR. CLAYCOMB: Well, I think I was
- 14 planning to do that. Of course, this relates to
- exhibit 71, all my testimony is included in
- 16 exhibit 71.
- 17 And it would be helpful if the staff
- 18 witness could listen to this, too, because I would
- 19 like to mention a couple of things in exhibit 71.
- 20 HEARING OFFICER GEFTER: Okay, well, you
- 21 need to again frame the question for the witness.
- MR. CLAYCOMB: Well, I'm going to get to
- 23 the question, but I want to lay a little --
- 24 HEARING OFFICER GEFTER: You can make
- 25 your statement later. Ask the questions first to

- 1 the witness.
- 2 MR. CLAYCOMB: All right.
- 3 CROSS-EXAMINATION
- 4 BY MR. CLAYCOMB:
- 5 Q In your analysis did you consider the
- 6 impact of global warming on public health?
- 7 A No, I did not.
- 8 Q And would you agree that carbon dioxide
- 9 is a major global warming gas?
- 10 A Carbon dioxide?
- 11 O Dioxide.
- 12 A Carbon dioxide is one of the greenhouse
- gases. And there's been much research in this
- 14 area, and the area is somewhat inconclusive among
- 15 the experts. However, I would agree that CO2 is
- 16 considered one of the greenhouse gases, yes.
- 17 Q Well, would you consider it the major
- 18 greenhouse gas?
- 19 A In terms of quantity of emissions it is
- 20 a significant greenhouse gas from combustion of
- 21 fossil fuels, yes.
- Q Well, in terms of its overall effect on
- 23 global warming, then, would you consider it the
- 24 major greenhouse gas?
- 25 A Well, again, if we're getting back to my

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area of testimony and what I did for this project,
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- 2 that's outside of my area of scope for this
- 3 project. I was looking at air toxic emission
- 4 factors from the combustion of natural gas, and
- 5 those localized impacts in the area of Otay Mesa.
- 6 Q Well in the final staff assessment
- 7 referred to the California Health and Safety Code,
- 8 41700, and by the definition contained in that
- 9 section, would it be your opinion that carbon
- 10 dioxide would fit as one of those substances that
- should not be discharged?
- 12 A Could you repeat what section you're
- 13 talking about?
- 14 Q 41700.
- 15 A Oh, of the Code?
- 16 Q Of the Health and Safety Code.
- 17 A Okay, could you restate your question?
- 18 Q Would you see any reason why carbon
- 19 dioxide should not be considered a substance that
- should not be emitted under the Code?
- 21 A Okay, --
- MR. CARROLL: Let me just interrupt.
- 23 HEARING OFFICER GEFTER: Do you have an
- 24 objection?
- 25 MR. CARROLL: I have an objection, I'm

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1 not sure that Mr. Koehler is familiar with the
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- 2 code section 41700. If he is, he's free to answer
- 3 the question. But, I think it's a little bit
- 4 outside of his area of expertise. But if he knows
- 5 the answer to it, he's welcome to answer it.
- 6 MR. CLAYCOMB: Well, I can read the
- 7 section. I've got it right here.
- 8 MR. KOEHLER: Okay, well, I doubt if you
- 9 want to read that, but generally that Health and
- 10 Safety Code section refers to, from what I
- 11 understand, the establishment of air quality
- 12 programs and regulated pollutants are established
- under that program. And this is not one of the
- ones that we're talking about.
- But, go ahead.
- 16 BY MR. CLAYCOMB:
- 17 Q Well, let me read this: No person shall
- 18 discharge from any source whatsoever such
- 19 quantities of air contaminants or other material
- 20 which cause injury, detriment, nuisance or
- 21 annoyance to any considerable number of persons or
- 22 to the public or which endanger the comfort,
- 23 repose, health or safety of any such persons or
- the public or which cause or have a natural
- 25 tendency to cause injury or damage to business or

- 1 property.
- 2 A Okay, and I'm not an attorney, but that
- 3 section of the Health and Safety Code goes on to
- 4 establish the concept of air districts, and
- 5 underneath those air districts they adopt programs
- 6 to address that general language in the code.
- 7 And I guess I would have to defer to the
- 8 District on that. This project analyzed all
- 9 applicable air contaminants pursuant to those
- 10 regulatory requirements.
- 11 Q Maybe I'll ask this question one more
- 12 time slightly differently. I would say that that
- description of a contaminant or other material
- 14 which causes all those things would fit carbon
- 15 dioxide --
- 16 HEARING OFFICER GEFTER: All right,
- 17 well, the --
- 18 BY MR. CLAYCOMB:
- 19 Q -- because of its impact on global
- 20 warming and the effects on public health of global
- 21 warming.
- 22 HEARING OFFICER GEFTER: Certainly, Mr.
- 23 Claycomb, you can argue that. The witness has
- 24 already answered the question. That was his
- answer.

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1 MR. CLAYCOMB: Well, he said it doesn't
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- 2 apply, then?
- 3 HEARING OFFICER GEFTER: Well, you heard
- 4 his answer. And you have a different view, which
- 5 you can argue to us later. Would you ask him
- 6 another question?
- 7 BY MR. CLAYCOMB:
- 8 Q Well, if carbon dioxide doesn't fit in
- 9 that section, as a prohibitive substance, then
- 10 where in the California statutes would it be
- allowed as an emitted substance?
- 12 HEARING OFFICER GEFTER: Mr. Koehler,
- can you answer that question?
- MR. KOEHLER: No. I'd have to say that
- 15 really was beyond the purview of my analysis, so I
- 16 can't answer that question.
- MR. CLAYCOMB: Okay, that's all.
- 18 HEARING OFFICER GEFTER: That's all your
- 19 questions?
- MR. CLAYCOMB: Yes.
- 21 HEARING OFFICER GEFTER: Do you have any
- redirect of your witness?
- MR. CARROLL: No, we don't.
- 24 HEARING OFFICER GEFTER: Thank you. You
- can stay there, Mr. Koehler, we'll go on to

1 staff's witness on public health. And the witness

- 2 needs to be sworn.
- Whereupon,
- 4 OBED ODOEMELAM
- 5 was called as a witness herein, and after first
- 6 having been duly sworn, was examined and testified
- 7 as follows:
- 8 DIRECT EXAMINATION
- 9 BY MR. OGATA:
- 10 Q Could you please state your name for the
- 11 record?
- 12 A My name is Obed Odoemelam.
- 13 Q Dr. Odoemelam, could you please tell us
- what is your job title at the Energy Commission?
- 15 A I am Staff Toxicologist in the
- 16 Environmental Division.
- 17 Q What are your duties?
- 18 A I help develop advice on health impacts
- 19 and I was part of the interagency committee group
- 20 that developed the health risk assessment
- 21 guidelines that I used in this analysis.
- Q Do you have before you the testimony in
- 23 public health that you prepared?
- 24 A Yes, I do.
- 25 Q And that's part of the final staff

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1 assessment, is that correct?
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- 2 A Yes, it is.
- 3 Q Do you have any changes or corrections
- 4 that you'd like to make at this time?
- 5 A No, I don't.
- 6 Q Would you please summarize your
- 7 testimony for us very briefly?
- 8 A I assessed the proposed project with
- 9 respect to both the criteria and noncriteria
- 10 pollutants. I focused mostly on the noncriteria
- 11 pollutants, which are the air toxics with respect
- to the potential for cancer or noncancerous risks.
- 13 The analysis and the assessment was made
- 14 using established criteria. And I found that the
- 15 emissions at the levels projected would not cause
- 16 a significant cancer or noncancer health risks.
- 17 But with respect to the criteria
- 18 pollutants, which are normally addressed in the
- 19 air quality section, when we have a problem area,
- 20 as in the San Diego area where you have existing
- 21 levels that are higher than established for air
- 22 quality standards, we do the same risk assessment
- 23 so that we can establish for our air quality staff
- the background level that will allow for them to
- assess the need for mitigation, the adequacy of

1 mitigation, and the need for specific conditions

- 2 for certification.
- 3 Q Does that conclude your testimony?
- A Yeah, that's the end of my testimony.
- 5 MR. OGATA: I have no further questions.
- 6 He's available for cross-examination.
- 7 HEARING OFFICER GEFTER: Does the
- 8 applicant have cross-examination?
- 9 MR. CARROLL: No, we do not.
- 10 HEARING OFFICER GEFTER: Does Cabrillo
- 11 have cross?
- MR. VARANINI: No.
- 13 HEARING OFFICER GEFTER: Ms. Duncan.
- MS. DUNCAN: Yes, I do.
- 15 CROSS-EXAMINATION
- 16 BY MS. DUNCAN:
- 18 report, under conclusions, that last sentence,
- 19 that because of existing problems at the state
- level with ambient air quality that there would be
- 21 a need for mitigation of any pollutant that adds
- to that situation, did you hear the PM10
- 23 mitigation proposal here today? Were you here and
- heard that?
- 25 A Yes. I consulted with staff all along

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with respect to the limitations of the mitigation
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- 2 process, and when it's adequate. And the
- 3 potential health impacts of failure to mitigate,
- 4 and all these in the context of limitations of the
- 5 health effects information.
- 6 So, the mitigation plan I helped
- 7 establish with our staff.
- 8 Q The 1.7 million that was proposed? Or
- 9 the 1.2 million that I believe we're at now?
- 10 A The 1.7 million was staff's best effort
- 11 to arrive at some defensible mechanism for
- 12 establishing the parameters for the cost of such
- 13 mitigation. Again, in the context of the total
- 14 universe of uncertainty in the analysis process.
- 15 Q Are you involved in this sort of process
- on other projects before the Commission statewide?
- 17 A You mean trying to identify mitigation
- 18 and the need for mitigation --
- 19 O Yes.
- 20 A -- and the adequacy of mitigation?
- 21 Q Yes.
- 22 A Yes. In all areas in which we have
- 23 problem -- I work with staff again. The most
- 24 important thing is to understand the limitation of
- 25 the health effects information, because there's

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1 not as much specificity in the health effects
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- 2 information as the general public might believe
- 3 sometimes.
- 4 So, we try to identify this limitations
- 5 and make recommendations, again in light of the
- 6 uncertainty in the underlying science.
- 7 Q In your testimony and in your statement
- 8 in the FSA, you seek to defer to air quality,
- 9 which was Mr. Layton, in terms of determining the
- 10 mitigation. You did not develop it, yourself.
- In your opinion, in your professional
- opinion does this PM10 mitigation package
- accurately reflect other packages in other
- 14 projects statewide?
- 15 HEARING OFFICER GEFTER: Okay, first of
- 16 all, Ms. Duncan, Mr. Odoemelam just said that he
- 17 participated in developing the PM10 mitigation
- 18 plan, so that part of your statement was
- 19 misstating his testimony.
- 20 But you may continue to ask the rest of
- 21 your question.
- MS. DUNCAN: Okay, let me provide the
- 23 foundation.
- 24 BY MS. DUNCAN:
- 25 Q In Matt Layton's testimony he said

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1 elsewhere in the state PM10 generally tends to be
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- offset on a ton-per-ton basis.
- For some reason that's not happening
- 4 here in San Diego. And what I'm hearing is
- 5 because offsets are not available, that's the only
- 6 answer I've been able to come up with so far.
- 7 So I'm trying to understand if this
- 8 particular proposal for PM10 for this project
- 9 represents -- is it an equitable project compared
- 10 to other PM10 mitigations for other plants
- 11 certified by this Commission so far? Is it
- 12 similar? Or is it dissimilar?
- 13 And if it is dissimilar or similar,
- 14 please explain how.
- MR. CARROLL: Object to the question
- 16 because it's premised on evidence that's not in
- 17 the record. Ms. Duncan stated at the outset that
- 18 it was her understanding that PM10 reductions were
- 19 not being provided because they were not
- 20 available. But I believe that the testimony of
- 21 the District earlier --
- MS. DUNCAN: That's in the FSA for air
- 23 quality.
- 24 MR. CARROLL: I believe the testimony of
- 25 the District earlier today was that PM10 offsets

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were not required -- were not provided because
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- 2 they're not required under the Air District's
- 3 rules.
- 4 And I don't object to the question, I
- 5 just object to the premise on which the question
- 6 was based.
- 7 HEARING OFFICER GEFTER: All right,
- 8 misrepresentation of the evidence, which the Air
- 9 District had indicated earlier that -- is that
- 10 correct, Mr. Moore?
- 11 MR. MOORE: That's correct.
- 12 HEARING OFFICER GEFTER: All right.
- MS. DUNCAN: So we have established on
- the record the reason that we were not offsetting
- 15 ton-per-ton is because the local Air Pollution
- 16 Control District does not require that?
- 17 MR. MOORE: Our rules do not require any
- 18 PM10 offsets for this project. CEC Staff is
- 19 requiring mitigation for PM10 in the context of
- 20 the CEQA that you're doing for the project.
- 21 We're willing to serve as a conduit for
- 22 the funds that have been proposed for that, but we
- 23 have no desire to -- we have no requirement that
- 24 PM10 offsets be provided.
- 25 HEARING OFFICER GEFTER: Thank you.

Okay, Ms. Duncan, do you want to ask the witness

- another question, or do you want to pursue this
- 3 question?
- 4 MS. DUNCAN: No, I won't pursue it.
- 5 I've got what I want. Thank you.
- 6 HEARING OFFICER GEFTER: All right. Do
- 7 you have another question for the witness?
- 8 MS. DUNCAN: No, I'm finished.
- 9 HEARING OFFICER GEFTER: Okay, Mr.
- 10 Claycomb, you may ask questions.
- 11 CROSS-EXAMINATION
- 12 BY MR. CLAYCOMB:
- 13 Q Mr. Odoemelam, I think you heard me ask
- the questions of the other witness. Do you have
- any knowledge of the potential health impacts of
- 16 global warming?
- 17 A Yes, I do. And in listening to what you
- 18 asked earlier, one would have to make a
- 19 distinction between the pollutants that directly
- 20 emitted from the source and cause direct health
- 21 effects when exposed.
- 22 But in case of carbon dioxide, the
- 23 impacts are secondary, and the mitigation approach
- on the regulatory basis is not set to where, or
- 25 beginning to set carbon dioxide specific

1 regulations, except to the extent that they allow

- 2 for us to minimize the amount of combustion that
- 3 we do. That's efficiency.
- 4 That is the general framework at this
- 5 point. But carbon dioxide, as a direct substance
- 6 is not really a toxicant, the kinds of toxicant
- 7 that are specified in the section that you
- 8 referred to.
- 9 Now, those substances that I referred to
- 10 are listed by the CalEPA so that we have specific
- 11 mitigation or controls for them. But carbon
- 12 dioxide has not gotten to that level yet. It's
- 13 not a direct toxicant.
- 14 Q Well, could you tell me where in the
- 15 statutes then emission of carbon dioxide is
- 16 permitted?
- 17 A It is not permitted, but it's an
- 18 unavoidable product of any combustion process.
- 19 So, we can't help but have carbon dioxide around.
- 20 What we know now is that it has indirect
- impacts, and as a general agreement that at this
- 22 stage all we can do is to the extent possible to
- 23 minimize combustion. But we have not developed
- 24 any carbon dioxide specific rules to treat carbon
- 25 dioxide as a toxic air pollutant.

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1 Q Would that description in 41700 cover
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- 2 carbon dioxide?
- 3 A Not directly, no. For the substances in
- 4 there, the CalEPA will list the specific compounds
- 5 that have to be assessed as toxic air
- 6 contaminants. We have not gotten there with
- 7 carbon dioxide at this stage yet.
- 8 Q No, I'm talking about just the words in
- 9 that section 41700.
- 10 A Well, the --
- 11 O I think carbon dioxide could be included
- as an air contaminant if you read the definition,
- just the English words that are in that
- 14 definition.
- 15 A I understand that, sir, but I am sure
- 16 you know we have what they call the 1807 process,
- 17 by which the CalEPA identifies the pollutants that
- are specified, each one of them is identified
- 19 before it begins to be considered as a toxic air
- 20 contaminant.
- 21 We're not there yet with carbon dioxide.
- 22 It's an indirect -- it has indirect effects and
- 23 not the direct impacts that call for direct
- 24 controls that are specified for this section.
- We're not there yet with carbon dioxide.

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1 It's not a direct toxicant.
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- 2 MR. CLAYCOMB: I guess I'll have to give
- 3 up on that one, then. Somebody is going to pay
- 4 for it eventually.
- 5 HEARING OFFICER GEFTER: Do you have
- 6 another question of the witness?
- 7 MR. CLAYCOMB: No.
- 8 HEARING OFFICER GEFTER: Okay. Do you
- 9 have any redirect of your witness?
- MR. OGATA: No, no questions.
- 11 HEARING OFFICER GEFTER: Okay. Thank
- 12 you.
- 13 Ms. Duncan, do you have any testimony on
- 14 public health?
- MS. DUNCAN: No.
- 16 HEARING OFFICER GEFTER: Mr. Claycomb, I
- 17 know that you want to talk to us about public
- 18 health. Would you like to address the Commission,
- 19 the Committee?
- 20 DIRECT TESTIMONY
- 21 MR. CLAYCOMB: Well, just a little bit.
- I mentioned exhibit 71, everything in there, if
- people take a look at it, it would take awhile to
- 24 read all of it, but I would call your attention
- 25 specifically to that 41700.

1 And then the fact that in 3913 of the 2 Public Health and Safety Code it includes, as a 3 description of pollutant contaminant, it includes 4 carbon and gases. And certain CO2 is a gas, part 5 of the time at least. And the first three pages of part of that exhibit 71, which is Save Our Bay, Inc., 8 Intervenor testimony required as part of prehearing conference dated October 10th, the 9 10 first three pages are making the case that global 11 warming is a serious problem. I'd like to add to that today Ms. Duncan 12 13 brought in a book, Global Climate Change in 14 California, was written in 1991. So, people have 15 been aware of the problem for quite a long time now. Then there's another book, The Heat Is On, 16 17 and that's 1997 copyright. 18 And today they are discussing how to 19 implement the Kyoto Treaty which is a carbon 20 dioxide greenhouse gas emission reduction program, 21 in The Hague, Netherlands, and the United States 22 is taking a real beating on it because we're one

to do anything about it.

of the major -- the major producer of carbon

dioxide, and we're trying to wiggle out of having

23

24

1	And California EPA and the U.S. EPA and					
2	nobody else are doing anything about it. And it's					
3	time they started. And one man and the Energy					
4	Commission are not going to solve the problem.					
5	PRESIDING MEMBER LAURIE: Thank you,					
6	sir.					
7	HEARING OFFICER GEFTER: Thank you.					
8	Looks like we have actually completed our business					
9	for today early, before 5:00 p.m.					
10	Mr. Carroll, do you have a question?					
11	MR. CARROLL: Yes, one more thing. We					
12	did not move exhibits 32 and 33; they were the					
13	exhibits sponsored by Mr. Koehler into evidence.					
14	We would ask to do that at this time.					
15	HEARING OFFICER GEFTER: Is there any					
16	objection to exhibits 32 and 33? Hearing no					
17	objection, exhibits 32 and 33 are received into					
18	the record. Thank you.					
19	MR. CARROLL: Thank you.					
20	PRESIDING MEMBER LAURIE: Ms. Gefter, I					
21	would only note that my flight's not until 8:30,					
22	so					
23	(Laughter.)					

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25 plenty of time to have the applicant provide an

PRESIDING MEMBER LAURIE: -- we have

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1
         additional meal.
 2
                   (Laughter.)
 3
                   HEARING OFFICER GEFTER: Okay, can we
         take all this off the record?
 5
                   (Laughter.)
 6
                   HEARING OFFICER GEFTER: Off the record.
                   (Off the record.)
 R
                   HEARING OFFICER GEFTER: For December
 9
         4th we are intending to hear testimony on the
10
         topics of land use and traffic and transportation.
                   We will also hear the recommendations of
11
12
         staff on their analysis with respect to cumulative
13
         air quality impacts from the burning of fuel oil.
14
                   And we will also give the parties an
15
         opportunity to rebut staff's recommendation,
16
         whatever it might be. And we will see all that,
17
         the testimony on land use, traffic and
         transportation, and staff's recommendations on air
18
19
         quality, and staff's additional alternatives
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         testimony which we will also hear on the 4th, will
21
         be filed December 1st.
22
                   And if the parties wish, staff will
         email that to the parties so they can see it ahead
23
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We also will hear rebuttal testimony

of time.

24

Τ	from Mr. Filippi, who will provide testimony in
2	response to Mr. Weatherwax's testimony. Correct?
3	MR. CARROLL: That's correct.
4	HEARING OFFICER GEFTER: And we'll also
5	hear testimony on compliance, essentially from the
6	applicant. And then any other remaining issues
7	that were pending, we'll discuss them on the 4th.
8	December 4th is a teleconference, we are
9	providing a toll free number for people to call
10	who don't want to travel up to Sacramento.
11	The hearing will begin at 1:00 p.m. And
12	we expect to be finished by 5:00 we hope on that
13	day.
14	Hearing no other comments at this time,
15	this hearing is adjourned.
16	(Whereupon, at 4:05 p.m., the hearing
17	was adjourned, to reconvene at 1:00
18	p.m., Monday, December 4, 2000, at
19	Sacramento, California.)
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21	
22	
23	
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CERTIFICATE OF REPORTER

I, VALORIE PHILLIPS, an Electronic

Reporter, do hereby certify that I am a

disinterested person herein; that I recorded the

foregoing California Energy Commission Hearing;

that it was thereafter transcribed into

typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set $$\operatorname{\textsc{my}}$$ hand this 28th day of November, 2000.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345